

Chapter 18

Grade Twelve – Principles of Economics (One Semester)

- How is economics about scarcity, investment, growth, employment, competition, protection, entrepreneurship, and markets?
- What is capitalism? What are its benefits and problems?
- What does it mean to be financially literate?
- How do worldwide markets affect me?

The study of twelfth-grade economics provides students with a unique opportunity to consider the impact of choice upon individuals, groups, and institutions. It offers a lens to understand and analyze human behavior and it builds a student's ability to make informed decisions based upon relevant economic information such as: an analysis of costs and benefits; the trade-offs between consumption, investment, and savings; the availability and allocation of natural resources; the distribution of resources among investors, managers, workers, and innovation; the role of the government in supporting, taxing, and investing in industries; and human and physical capital. The discipline also provides an important frame from which to consider the impact of governmental action (or inaction) on the lives of its citizens. Understanding how the economy functions and how economic reasoning can inform decision making will provide students with the tools they need to become financially literate and independent. Economics is the study of how people choose to use resources. It is also a discipline that analyzes how to promote productive economic activity such as entrepreneurship, education and government investment in infrastructure, research; it studies how to promote full employment, fair wage growth, and return on capital; it explores how to avoid financial dislocations and predatory business practices; and it argues how best to provide basic safety-net supports such as retirement for each citizen. The resources people use are land, labor, and capital; these resources are finite, or what some people call scarce. Scarcity means that resources, such as natural and human resources, are limited in quantity compared with the competing demands for their use. In this one-semester economics course, students examine more deeply the choices they make and explore how these choices have consequences that ripple across the world. One question that can frame the course is: **How is economics about scarcity, investment, growth, employment, competition, protection, entrepreneurship, and markets?** By learning about economics through questions, students will deepen their understanding of fundamental economic concepts like cost-benefit analysis; they will analyze the American economy in a global setting; they will explore

how the federal government affects the American economy; they will learn about the labor market in a national and global setting and see themselves in it by identifying which jobs will be growing in the near future and what the education requirements are for certain jobs; they will analyze aggregate economic behavior of the US to learn about how unemployment and interest rates, for example, affect the country; and they will explore issues related to international trade. To achieve all of this, students learn to apply basic economic principles and methods of analysis, building on the knowledge of economics gained in their studies in earlier grade levels. In kindergarten, students learn that they make choices. By twelfth grade, they apply economic concepts to the decisions they make in their own lives and to the economic, social, and political issues that dominate the world around them.

Although students first encounter Economics as a separate course in the twelfth grade, much of the course content will not be new to them. Concepts like human capital, the availability of work, cost-benefit analysis, the role of markets, infrastructure like roads and public health, the role of law and patents in encouraging innovation, the importance of private and governmental investments in research and technology, and international trade can be explained in their study of history in earlier grades. For example, in the elementary grades, students can think about how scarcity of resources, such as what Americans faced in the early Colonial period, affected the choices they made. At the middle school level, students can consider the impact of trade on the growth of civilizations during the medieval period. In the eleventh grade, students can examine the contributions of capitalism, industrial development, scientific innovations, and entrepreneurship to continued growth in the standard of living. They can also examine the excesses of late nineteenth-century capitalism, such as trusts and predatory practices, scrutinize the increasing economic role of the federal government during the Great Depression, and debate the effectiveness of New Deal programs including regulation, social supports, and labor rights on the American economy. Thus, students have been revisiting in a variety of historical contexts questions about scarcity of resources. Now in twelfth grade, they will examine primarily the current contexts to consider important economic questions including **How does the economy relate to me? What does it mean to budget? How do markets work in the abstract and concrete world?**

Fundamental Economic Concepts and Reasoning

- How are resources allocated?

- What is a market economy?

Students might begin learning about economics from a personal perspective; in other words, to get invested in the discipline students can begin their study of economics by seeing their place in it, starting with personal budgeting and moving outwards to identify their economic place in the world through a multitude of layers. Teachers might begin by telling students they will be assigned a unique (and imagined by the teacher) economic identity: this identity initially consists of a monthly salary, a list of bills, and a checkbook or an online system of sending and receiving money. Starting with their monthly salary, students are directed to determine their take home pay by subtracting federal and state taxes (teachers can provide this information to students or have students locate it and estimate their rate based on their salary). Next, students must pay their bills. Bills consist of a pre-determined amount for these categories: rent/mortgage, utilities, cell phone, student loan payment, car payment, car insurance. Once bills are paid, students allocate money for the remainder of the month. They can choose whether or how much to save; how much to devote to food, gas, and other staples; and how to use any discretionary money left over. Once students have divided their resources for a month, they should take a step back and look at their larger budgets, perhaps using budgeting tools online, making charts or graphs to understand how and where they spend money.

With a budget in hand, students can begin to learn about different kinds of debt and different kinds of ways of accumulating personal wealth. Starting with debt, teachers provide students with an overview of what a credit card is, how interest gets calculated, what compound interest consists of, and how credit card debt affects individuals in the marketplace. Students can calculate credit card payments and factor that into their contrived economic identities for practice. In addition, teachers can provide similar overviews of student loan debt and mortgage debt and explain how these latter forms of debt are often considered “helpful” debt in the individual’s long-run as they contribute to more opportunities for wealth over the course of a lifetime. Still, these forms of debt can be calculated and similarly factored into their contrived economic identities.

Students should also learn about different options of saving money. While teachers will go into more depth later in the semester about marketplace investments (in which students can learn to “play” the stock market, for example), students can learn now about different options for saving their resources from their above-described budgets. Teachers might offer students three options for investment: for example, a zero-risk very small interest savings account or CD, a small risk mutual fund, or a higher risk investment. Provided with data supplied by the teacher, students can calculate

their wealth from their above provided identity over time and extrapolate where they will be in one year, five years, fifteen years etc. all the while working through compound interest and acknowledging that interest rates vary significantly depending on many factors in the economy. At the end of this initial unit, students should come away with an up-close look at their stakes in the economy and can begin to place larger concepts in the frame of their own place in it.

By learning about personal finance from this individual perspective, students will now learn about how international markets are interrelated and how they affect their own finances and economic opportunities. At the more local level immediate relevance can be achieved by discussing city and/or county budgets (i.e., revenues and expenditures), payday loans, rent-a-centers, and even chambers of commerce. Studying these topics now will help students when they become adults, and must confront decisions about household budgets, student loans, credit cards, mortgages, and savings and investment strategies. Just as students began this course learning about personal finance, the concepts can be woven throughout the course, applying the economic ideas and analytical tools mentioned above to other sectors of the economy. Budgeting can be taught as an example of scarcity; job applications can be taught as examples of human capital inventories; student loans can be taught as an investment in developing human capital; use of credit cards can be taught to explain the opportunity cost of interest and repayment; and interest on credit can be taught as an example of price determination through supply and demand.

Economics is a social science that focuses on the choices people make about the utilization of resources and the production, distribution, and consumption of goods and services. Students can investigate the question: **How are resources allocated?** to better understand the process of distributing resources. Students learn that every economic issue involves individual choices based on both monetary and nonmonetary incentives. Looking at a store in the mall, the manager decides what goods to stock, manufacturers choose which goods to produce, and the consumer decides what to buy. But on a broader level, one that is often invisible to the consumer, decisions over what products are developed and offered for sale are typically shaped by executives of public corporations, who must simultaneously consider the needs of stockholders, corporate boards, workers, and customers. Executives also make decisions about trade-offs among human and technological investment, investment and research for future growth versus compensation of employees, managers, and shareholders.

To better understand the choices that the store manager, manufacturer, and executives make in

response to limited resources, students can consider the tradeoffs they make every day in their own lives. For example, students may ask themselves, “How many hours will I use my human capital to study and how many hours will I use it to work for pay?” A fundamental concept in economics is that the cost of something is what you give up to get it. All decisions involve opportunity costs, that is, the cost of the best alternative that you give up when you make a choice. If the student chooses to study longer, he or she must give up hours that could be spent working for pay. However, the student must also consider the potential benefits of earning better grades, attending college, and receiving a higher future salary that may result from studying now. Students will examine the opportunity costs of choices, such as: Will I join the drama club? How much education or post high school training will I acquire? What will I buy with my money? How much will I save? Will I use a credit card for purchases and what is the interest rate? By learning how to conduct cost-benefit analyses and how to evaluate the marginal benefits and marginal costs of alternative uses of resources, students will learn how to make informed decisions.

Next, students can consider the questions: **What is capitalism?** and more specifically, **What is a market economy?** Students consider the potential for dynamic growth from a capitalist system, through the reinvestment of profit for future earnings, increased effectiveness and efficiency through economies of scale, and the reduction of risk through the creation of joint stock companies. They learn about market economies and concepts, such as private property, that form a fundamental basis for the American economy. They study the significance of limited liability corporations, the rule of law and contracts, protection of innovations through patents, the role of government in providing necessary infrastructure like transportation, ports, public health, communication networks, and investment in medical and technological research. They learn that market economies provide incentives that often spur innovation and growth. Although there is no doubt that profit is the main motivator for businesses, some business owners hope to produce goods and services that yield socially desirable outcomes. Nevertheless, no market-based business can survive if it does not return a profit. Regarded as the father of modern economics, Adam Smith argued that individuals pursuing their own self-interest can also improve society as a whole. Smith also advocated for basic government supports and the importance of individuals following a moral code. A free market often promotes innovation, reinforces individual liberty by protecting private property, encourages review and debate, and rewards initiative. However, markets may also create consequences such as pollution, monopolies, predatory practices, inequitable income distribution. A question that students might consider is what are the components of a free economy in the abstract as opposed to free

economies in the real world? Students might also consider the special case of utilities by investigating the question, **What is the best way to deliver services provided by utilities: through a public or private (but regulated) monopoly?**

Students can begin to identify similarities and differences between economies functioning in the abstract versus reality, as this is key in setting up later economic principles. Students can also address the question: how has the relative market power and political power of business and labor changed and what has been the effect of the change on income distribution over the past one hundred years? Students should be able to use data to support their positions and present a careful evaluation of the source of the data.

The American Market Economy

- What are key components of the American economic system?
- How are prices determined? Who determines prices?
- How do banks and markets function?

Students will first learn about the operation of markets by studying the American market economy. Students can begin to learn about the functioning of the economy by addressing the question: **What are the key components of the American economic system?** A market is an interaction between buyers and sellers. Students will learn that a market economy is a decentralized economic system where most economic decisions are made by individuals.

One fundamental component of market economics is the premise that individuals respond to incentives. An incentive to a worker is pay whereas incentive to a business is profit both in the present and in the future. Profits in a market economy encourage entrepreneurs and businesses to invent, construct, and produce in an efficient manner to meet the desires of consumers. Incentives to business can be multiple as they attempt to satisfy stockholders, consumers, or workers. Consumers also respond when incentives change: if gasoline prices stay high for a long time, drivers will switch to more fuel-efficient cars or alternative forms of transportation.

Another component of the American economic system is that relative prices in a market economy change over time with changes in supply and demand. To illustrate the relationship between sellers

and buyers, students may learn about the logic of supply and demand. They can trace changes in supply and demand using historical and contemporary examples and study the resulting change in equilibrium price and quantity. For example, an unusually large wheat crop, without an increase in the demand, will cause wheat prices to fall. Alternatively, a shortage of a popular video game system during the holiday season will cause the price to rise. Students can examine specific cases of price changes and determine if a change in demand or supply or both caused the fluctuation in price. Students can also participate in a market economy simulation to learn about the interaction of sellers and buyers.

Students can continue to learn about key components of the American economic system by considering the question: **How are prices determined? And who establishes prices?** Markets allocate resources to produce goods that are in demand, and they determine the quantities of goods produced and the prices of those goods. Markets range from the local used car market to the market for professional baseball players. The interaction between buyers and sellers in markets establishes the current price of a good, or what economists call the equilibrium price. If a price is too high, a surplus will occur and sellers must lower prices. If sellers charge too low a price, the resulting shortage informs sellers that they can get a higher price. Students can see that the price of a Picasso painting and a soft drink alike are determined by both the supply and demand in the marketplace. Open competition within markets aims to maximize economic efficiency, but it can also negatively affect different groups and individuals. For example, students can study how global competition from producers of goods ranging from toys to automobiles created new challenges for domestic manufacturers and workers in the United States (the consequences for other nations and people will be addressed in later units). Global competition effectively lowers the equilibrium price for these items. To use the example of toy dolls: because foreign manufacturers and workers produce dolls for less money than American manufacturers (in part because American workers command higher wages and the materials it takes to produce dolls are more expensive domestically), foreign manufacturers can then charge less money for the doll in the marketplace than the American manufacturer can; consequently this global competition lessens the amount of money American consumers are willing to pay for a doll. Because of this chain reaction in the equilibrium price of dolls, domestic manufacturers and workers earn less money for the same doll they had been producing.

Students can continue studying the interaction between the consumer and producer by exploring the question: **Who establishes prices in the marketplace?** Some prices are set by pure market

forces through open competition. Students might investigate examples of how competition in the marketplace led to significant price reductions for computers and smart phones, but also how through monopolies and collusion, prices on some goods like drugs have stayed high. Other prices in the marketplace are set by the government in the form of price floors or price ceilings. A price floor sets a price above the equilibrium level; an example of a price floor in the labor market is the federal minimum wage. A rent control law that holds rents below the equilibrium is an example of a price ceiling in the housing market. Government attempts at price setting to improve market outcomes may have benefits and unintended consequences for market participants. Rent control laws, for example, can benefit existing renters, but these laws can also lead to a shortage of available apartment units, if builders and/or property owners cannot recoup their initial investment or make a profit, they will not have enough of an incentive to construct and/or rent apartments in the future. Another historical example of government attempts at price setting happen in times of war, which requires immediate and concentrated action; during World War II there developed a close beneficial relationship between business and government.

Students will also learn about the role of financial markets and banks in the functioning of the American economy by addressing the question: **How do banks and markets function?** Students might begin their exploration of the banking system by relating it back to their initial unit on budgeting. They can discuss personal risks and costs, including banking and other fees, personal debt, and identity theft. Students can also learn how banks can support the work of small-business owners through the formation of new businesses, how they provide student loans for education, and how different banks serve the specific interests of their customers. Beyond working on day-to-day transactions with individual customers, banks channel funds from savers to consumers and investors, expanding credit in the economy. Financial markets facilitate the raising and transfer of capital and the operation of international trading networks. When banks and financial markets fail to perform these functions, or when they pursue risky and speculative loans like offering stock market credit or engage in questionable financial instruments such as unregulated derivatives, they can have negative impacts on an economy, as was the case in the United States in the Great Depression, as well as during the financial crisis that began in 2007. Students should study a period of economic crisis to gain a better understanding of the American market economy and also to serve as a link to the next unit, which focuses on the role of government in the American economy. Students should also use economic data (like figures on unemployment, housing foreclosures, income distribution, or losses in the stock market for example) to present a case for or against the

statement that the American economy has a free financial system. They might also investigate the results of the repeal of the Glass-Steagall Act (or Banking Act of 1933), which prohibited commercial banks from combining their normal banking functions (accepting deposits and making loans) with investment activities and speculation.

An additional way that students can address the question **How do banks and markets function?** is through practice. As with their initial imagined budget and personal finance exercise, students can extend that same set of circumstances to financial markets. Provided with a budget and clearly-defined set of financial goals, students can make simulated investments in the stock market and analyze changes in their value over time.

Government Influence upon the American Economy

- How is the American government involved in the economy?
- How has the American government been involved in the economy in the past?
- How does the federal budget affect ordinary people?
- What does it mean to pay taxes?
- Why is there a Federal Reserve Bank? How does it function?
- What does it mean to run a deficit?

Students can further their studies of the American economic system by addressing this question: **How is the American government involved in the economy?** The U.S. economy is primarily a market economy with some government intervention. As a result, students learn that it is more accurately classified as a “mixed economy.” Students can review from previous classes the economic significance of government actions like investments in roads and other infrastructure, health, basic medical and technological research, reigning in monopolies and predatory practices, pure food and drug initiatives, and regulations against pollution and risky banking practices. Government agencies like the Federal Reserve and Consumer Financial Protection Bureau sometimes intervene in markets to promote the general welfare, provide for national defense, address environmental concerns, establish and enforce property rights, and protect consumer and

labor rights. In this unit, students investigate the changing role of government in the economy, including the consequences of both government action and inaction in specific sectors of the economy. In particular, they can analyze the outcomes of incentives and investigate the distributive effects of government policy. They learn to identify the benefits and costs of government influence in the economy in different industries and for different groups of people. For example, students can consider the government's response to hydraulic fracturing. Government regulation of "fracking" can impact the environment, the local labor market, and the growth of a variety of small and large business interests. Students can trace how government policy steers any one sector of the economy through its regulatory activity.

Students can consider the legacy of governmental involvement in our mixed economy by addressing the question: **How has the government been involved in the economy in the past?** They might look historically to evaluate the impact of government in land purchases like the Louisiana Purchase and of Alaska; the investment in infrastructure, like canals, railroads, and the interstate highway system; investment in education, through land grant colleges and the GI Bill; and investment in science and technology, such as space exploration. Students can analyze and evaluate the extent and impact of government research into energy efficiency, space, medicine, and other investments, examining the distribution of benefits and costs of these investments among different groups. Students might also look at contemporary examples of government involvement in the economy like the 2010 Consumer Protection Act, which established the Consumer Financial Protection Bureau. Students can consider the ways in which the government aims to make markets work for ordinary Americans as they use credit cards or analyze mortgages, for example.

Federal, state, and local governments have enacted a wide range of laws intended to protect the health of the environment, many implemented through fiscal policies, used to influence business decisions and practices that affect public health and the natural environment. Students learn about the externalities of modern production and consumption, and the interactions between economic policy and protection of the environment, allowing them to explore marginal costs, marginal benefits, and opportunity costs of government actions. This builds their knowledge about the considerations and processes involved in decisions related to the environment and natural resources (California Environmental Principle V). Students investigate the range of fiscal tools government uses to help protect the environment: establishing or managing markets, providing subsidies, imposing taxes, and using command and control policies (See EEI Curriculum Unit 12.3.1. - Government and the

Economy: An Environmental Perspective).

Students might also analyze the long history of issues related to water ownership in California, for example, offering an opportunity to develop their understanding of the American system of private property ownership through a lens of renewable and nonrenewable resources. Allowing them to explore connections between individual property rights and societal decision-making, helps students recognize the wide spectrum of social, economic, political, and environmental factors related to the use and conservation of natural resources (California Environmental Principle V). Students recognize that many of these factors are considered when governments and communities make decisions about private property rights and the balancing of individual's self-interest and society as a whole (See EEI Curriculum Unit 12.1.4.- Private Property and Resource Conservation Economics).

Government stabilization economic measures include both fiscal and monetary policies. To understand fiscal policy, students should address the questions: **How does the federal budget affect ordinary people? And what does it mean to pay taxes?** The federal government's expenditures and tax collection significantly affects the economy. Students learn about the components of the federal budget and the ways in which Congress and the president enact spending and taxing policies. To learn about the consequences of economic planning within the government, students identify how governments budget resources, they study how governments generate revenue, they define what a budget deficit is, they learn about how it is financed over time, and they explore the components of the national debt. Students might examine federal budget spending priorities and trace how federal tax dollars are collected and spent. They can participate in simulated federal budget exercises that investigate the ideas and priorities listed above. Students may also examine the historical trends in national debt by considering the question: **What does it mean to run a deficit?** They can look to examples from the 1970s through recent years to chart federal deficits and the consequences of it over time. Students can also conduct a cost-benefit analysis at a mock town hall meeting about spending priorities and investment. Students can then apply this information to regional and local levels by comparing the types of taxes that the state and local governments collect and analyze how those tax revenues are being spent.

Students continue examining the role of the government in the economy by addressing the question: **Why is there a Federal Reserve Bank and how does it function?** The Federal Reserve Bank, a mixed private/government institution, works to stabilize the economy through monetary policy. Students learn that the Fed acts as a central bank for the U.S. by influencing the quantity of

money in circulation, and by working to raise or lower short-term interest rates. The Fed tends to lower interest rates when it is fighting recession (a period of temporary economic decline marked by a fall in Gross Domestic Production in two successive quarters), and raises them when it is fighting inflation (a sustained increase in the general price level of goods and services). Students also see that both monetary and fiscal policies have limitations in their effectiveness in fighting recession and inflation. They also study the role of government in regulating and insuring banks to protect solvency and maintain public confidence in the economy.

In a panel discussion, students might consider a specific economic regulation being proposed by legislators (e.g., minimum wage, tax refunds, auto-emission standards). Using data and cost-benefit analysis, students can argue both for and against the regulation. To further extend their learning and provide a service to the community, students might hold the panel discussions in the evening. They could invite parents and other members of the community interested in better understanding the potential consequences of the proposed regulation.

Labor Markets

- What does it mean to work?
- How does one compete in the labor market?
- How are wages determined?
- How and why do workers organize?

The question **what does it mean to work?** can guide students as they explore all that is involved in the labor market – ranging from the small-scale application process for a part-time job after school to the large-scale quantitative information about labor statistics in the economy. Students apply their understanding of product markets to analyze labor markets, identifying skills that are in demand and projections of the growth of future jobs and their educational requirements, and the ways in which they can use their school and training to develop their human capital to meet those skill demands. Students can also consider the question: **How does one compete in the labor market?** In a competitive labor market, a worker's productivity and his or her contribution to a firm's revenues determines the demand for his or her services. Government regulations and labor unions

influence the labor markets. The marginal product theory of wages emphasizes the importance of a worker's human capital (experience, education, skills, and personal qualities) in influencing their wage. By reviewing the term *human capital*, students can see the relationship between the amount of education and training workers obtain and their future salaries.

The question: **How are wages determined?** can frame students' understanding of this component of the labor markets. Wages are influenced by the supply of workers in a specific labor market, as well as by the relative economic power of businesses and workers. There are far more low-skilled workers who are willing to work for lower wages than highly skilled workers. As a result, low-skilled jobs, such as food service and retail, often pay lower salaries than do highly skilled jobs, such as computer engineering and medicine. Students can study how businesses determine the skills required of their workers and investigate the role that this plays in creating profitable enterprises. Researching economic data and evaluating the source of the data, students can analyze the effects of migration and immigration on both product and labor markets. Students may review changes in the California labor market in the areas of agriculture, manufacturing, information, and technology to identify change over time in certain industries.

This question can help students understand the role of the labor movement in affecting workers and the economy: **How and why do workers organize?** Students also study the history of the labor movement and assess the impact that it has had on labor markets, including methods used by unions to gain benefits for their members. They can also analyze the role of government in protecting workers' rights to organize and strike, as well as in preventing excessive disruption from prolonged or violent labor actions. By researching data and evaluating the source of the data, students can participate in an investigation about the effects of unionization on wages and employment in particular industries, including farm and public sector workers. Students can participate in a collective bargaining simulation to better understand the competing interests of workers and employers. One group of students can examine the struggles of workers to increase their pay and improve their working conditions. Another group can consider the challenges of employers to improve productivity, limit costs, and, in the case of for-profit businesses, increase profitability. Students can also examine relevant legislation and court rulings, such as the right to organize, worker safety, and anti-discrimination policies. The first week of April is Labor History Week. Students might participate in a variety of activities or projects that make pupils aware of the role that the labor movement has played in shaping California and the United States.

This context of the labor market provides the necessary foundation for an analysis of current issues in the marketplace, such as the types of goods and services produced, needed skills, the impact of technological innovation, international competition, and the historical improvement and stagnation of real wages (which means wages adjusted for inflation). Students continue to address the question: **What does it mean to work?** as they wrestle with broader issues in the labor market. As part of this review, students discuss poverty and income distribution in the United States in both historical and contemporary contexts. Students can conduct a mock National Labor Relations Board (NLRB) election to debate the pros and cons of unionization. In addition, students investigate the effects of international mobility of capital and labor in a globalized labor market. For example, students can consider the impact of international economic agreements, such as the North American Free Trade Agreement, or NAFTA, upon the labor market and more specifically, students can use data and participate in a debate about the impact of outsourcing and insourcing on the US and foreign labor markets.

This unit also provides students with an opportunity to identify and analyze economic problems in their community, (e.g., housing, hunger, employment). They can evaluate local initiatives addressing the problem. Students might also work with local policymakers and community groups to address the challenges. Students who focus on the availability of affordable housing, for example, may create a website or pamphlet that they can distribute to community members detailing resources and tools available from governmental agencies and nonprofit financial services. Finally, students can participate in mock job interviews to help them evaluate their preparation for entrance into the labor market.

Aggregate Economic Behavior

- What is macro-economics and what does it reveal about the economy?
- How does a cyclical economy function?
- How does data help to tell the story of the economy?

The question: **What is macro-economics and what does it reveal about the economy?** provides students with a broader way of questioning and investigating the economy. Students learn to “read” the economy, distinguishing real from nominal data, and recognizing the significance of

major macroeconomic data. Macroeconomics looks at the “big picture” through surveys of the national economy and explains how it is integrated globally. Students will define gross domestic product (GDP), consumption, investment, savings, unemployment, and inflation to learn that economic growth is a sustained increase in incomes and output over time. Small percentage changes in economic growth can have a significant impact upon employment and price levels. Students will learn how the federal government compiles the measurements for economic growth and income, the unemployment rate, number of jobs created or lost, and the rate of changes in the price level, and the impact of changes in these data on their personal economic and financial opportunities. The question **how does data help to tell the story of the economy?** can help students synthesize this breadth of quantitative information. For a market economy, traditional keys to long-term economic growth include implementing incentives for innovation, investing in capital goods, improving the human capital of the workforce, and encouraging entrepreneurship and technological innovation.

Market economies experience fluctuations in income, output, employment, and price level. Students can consider the following question as they review ordinary fluctuations in the marketplace: **How does a cyclical economy function?** Students analyze various macroeconomic outcomes and the operation of the business cycle in the American economy, including the reasons for the repetitive sequence of booms and recessions throughout its history. Students learn that a decrease in total spending, or a drop in aggregate demand, can cause periods of contraction in the economy, which in turn causes economic downturns, such as the Great Depression of the 1930’s and the Great Recession of 2007 to 2009. Conversely, a high level of aggregate demand relative to aggregate supply can cause inflation. Students learn that hyperinflation, or an extreme case of inflation, is caused by too much money in circulation. Examples include the German experience between the world wars in the twentieth century, Argentina in the 1950s, and more recent experiences of Zimbabwe and Venezuela. Students can also learn about currency, circulation of currency and understand how that affects a nation and global markets; Greece’s economic problems that started in the 2010s provide a vivid example of how one country’s financial problems touch worldwide markets. Students study the importance of interest rates, both short-term and long-term, in affecting the business cycle and the operation of the broader economy.

The Global Economy

- What is globalization?
- How does globalization affect international and national economies, and individuals?
- Why are there critics of globalization?

In this unit students address the question: **What is globalization?** Due to trade liberalization policies (the lowering of trade barriers between countries), along with advances in technology, communication, and transportation that speed up trade between countries, all economies throughout the world are more closely integrated with one another today than at any other time in the past. As part of understanding what globalization is, students consider the question: **How does globalization affect international and national economies, and individuals?** Students explore how changes in government policy, technology, information, and the rise of global markets contributed to this process. A sign that the U.S. economy is more globally integrated is the large percentage of exports and imports in GDP. Students will learn what exports and imports are, examine a trade deficit and surplus, and examine the balance of payments. They learn how the United States economy can be influenced by external factors, such as an increase in the price of oil on the global market or major changes in the incomes of its trading partners.

Trade occurs between individuals and firms globally due to differing comparative advantages. To address the uneven consequences of globalization, students consider this question: **Why are there critics of globalization?** International trade can be mutually beneficial to countries as it encourages specialization based on comparative advantage, increases overall productivity and employment, and lowers prices for consumers. The growth of world trade has contributed to an overall increase in personal income in our recent history, but this increase has not been uniform across nations and within nations. Critics of globalization assert that freer trade does not equate with fair trade; certain nations and classes within nations benefit while other nations and classes within nations do not share in the prosperity. Students can analyze protectionist measures used to reduce imports and examine the positive and negative impacts upon different groups, such as the effect of trade restrictions implemented during the Great Depression. Students might collect data, evaluate the sources of the data, and use the data to analyze particular trade restrictions of the United States and its trading partners. They might use the same process to defend or argue against current trade

agreements and disputes between the United States and other countries.

Globalization refers to the faster and freer flow of goods and services, inputs, money, and ideas around the world, as well as the emergence of a global production system used by multinational corporations. Financial transactions, whether in the form of credit, stocks, or bonds, also flow quickly around the world and cause economies to be closely integrated with one another. Students learn that trade liberalization, technology, information, and lower costs of transportation have all fostered globalization. Students can trace the impact of globalization for themselves, for different groups in their own economy, and for groups in other countries. Students can also use their knowledge from tenth-grade world history in examining developing countries and studying how they have been impacted by globalization.

Grade Twelve Classroom Example: Globalization

Ms. Albert’s economics class is in the midst of their globalization study and she wants her students to get both an up-close and a broader view of how globalization affects their daily lives. The question the class considers in this unit is: **How does globalization affect me?** At the start of class Ms. Albert directs her students to identify one personal item they have on them or in their possession at that very moment. Many students take out their smart phones, some choose their t-shirts, and others look at their backpacks. Ms. Albert then tells her students that they will trace how that one consumer item they’ve chosen has participated in the global economy. She provides her students with a list of information that they must collect about that item: attempting to locate the origin or origins of the item’s raw materials, routing where it was assembled, finding where the company that produced the item is headquartered, tracing all of the countries that item has passed through, and then investigating its sale in the US. She cautions students that some of this information might be hard to trace, but that they can begin by researching on the company’s website and then map some of the places that materials are extracted and manufactured. Once students have assembled this list of information about their item, Ms. Albert directs them to tell the story of how their item got to the store in one to two paragraphs. Some of Ms. Albert’s students begin by explaining how the concept of the item got started, and others begin with the physical manufacturing of the item itself. But all of Ms. Albert’s students conclude with a statement of how their lives are shaped by globalization; they recognize that the wide-scale availability of affordable consumer goods is made possible because of the global marketplace.

CA HSS Content Standards: PE 12.2, 12.6

CA HSS Analysis Skills (9–12): Chronological and Spatial Thinking 3 CA CCSS for ELA/Literacy: RH.11–12.7, 9, WHST.11–12.2, 7

Students can also consider the impact of global trade on American foreign policy by investigating the impact of globalization on poverty, the environment, urban slums, child labor, women’s rights, or AIDS/HIV through case studies, group presentations, or model United Nations sessions. Students can explore the human rights issues that arise in the context of global trade. These can include rights of children, rights of women, the rights to employment, education, health care and leisure recognized by the Universal Declaration of Human Rights. How are the rights of individuals, families and groups protected in a globalized economic system? Students also learn about examples of sustainable development.

Microfinance and microloans also play key roles in the globalized economy. Working in small groups, students can study requests for micro-financing from various regions of the world. Using criteria known to lead to successful loans, groups can assess the proposed projects and make presentations to the rest of the class about the project they believe will have the most sustainability for the new economy. The class can vote for their top project. To bring student learning full circle and return to their initial framing question **How is economics about scarcity?** to analyze microfinance and global economics through this lens.

California Department of Education

July 2016