

Ministry of Science and Higher Education of the Russian Federation
Federal State Budgetary Educational Institution of Higher Education
«Maykop State Technological University»

APPLIED ECONOMICS IN MEDICINE

Training manual

Maykop - 2020

УДК 330 (07)
ББК 65.9
E 40

Published by the decision of the Scientific and technical Council of
the Federal state budgetary educational institution of higher education
«Maykop state technological University»

Reviewers:

M.A. Ashinova - Doctor of Economics, professor of the
department of Finance and Credit at FSBEI HE «MSTU»;

S.K. Chinazirova - Associate Professor of the department of
Economics and Management at FSBEI HE «ASU»

Compiled by:

M.A. Bolokova - Head of the Department of Constitutional
Construction and State and Municipal Administration of Maykop State
Technological University, Candidate of Philosophy, Associate
Professor;

A.K. Dorgushaova - Dean of the Faculty of Information Systems
in Economy and Law of Maykop State Technological University, Doctor
of Economics, Associate Professor

E 40 ECONOMICS: Training manual. – Maykop: Publisher «IB
Kucherenko V.O.», 2020. – 91 p.
ISBN 978-5-907004-55-9

Training manual is for studying the discipline «Economics» by students of
non-economic specialties at universities. The training manual includes lectures
containing the required level of economic knowledge: economic laws, concepts
and categories that should be learned by students in the process of studying the
discipline.

ISBN 978-5-907004-55-9



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THE CONTENT OF MODERN ECONOMY

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- 2) Factors of Production
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1) WHAT IS ECONOMICS?

Economics affects our daily lives. We are continually being made aware of local, national and international economic issues, whether price increases, interest rate changes, unemployment and so on. We are also continually faced with economic problems and decisions of our own.

Many people think that economics is about money. Well, to some extent this is true. Economics has a lot to do with money: with how much money people are paid; how much they spend; what it costs to buy various items; how much money firms earn; how much money there is in total in the economy. But money is only important because of what it allows us to do; money is a tool and economics is more than just the study of money.

Economics can help answer these questions:

- How does our economic system work? That is, how does it manage to deliver the goods?
- When and why does our economic system go astray, leading people into counterproductive behavior?
- Why are there ups and downs in the economy? That is, why does the economy sometimes have a “bad year”?

The answer is that to get any kind of prosperity, you need a well-functioning system for coordinating productive activities – the activities that create the goods and services people want and get them to the people who want them. That kind of system is what we mean when we talk about the economy. And economics is the social science that studies the production, distribution, and consumption of goods and services.

Market economy is an economy in which decisions about production and consumption are made by individual producers and consumers. There is no central authority telling person what to produce or where to ship it. Each individual producer makes what he or she thinks will be most profitable; each consumer buys what he or she chooses.

These decisions involve making a choice from among a limited number of alternatives – limited because no one can have everything that he or she wants. One of the things that people discover every day is that *you can't have everything*. But to understand how an economy works, you need to understand more than how individuals make choices. We must make decisions in an environment that is shaped by the decisions of others. Although all economics at a basic level is about individual choice, in order to understand how market economies behave we must also understand economic interaction – how my choices affect your choices, and vice versa.

Now we will look at 12 basic principles of economics:

4 principles involving individual choice,

5 – involving the way individual choices interact, and

3 more involving economy – wide interactions.

We'll now examine each of these principles in more detail.

Principle №1: Choices are necessary because resources are scarce

What does it mean? You can't always get what you want. Limited income isn't the only thing that keeps people from having everything they want. Time is also in limited supply: there are only 24 hours in a day. And because the time we have is limited, choosing to spend time on one activity also means choosing not to spend time on a different activity. This leads us to our first principle of individual choice: ***People must make choices because resources are scarce.***

Human wants are unlimited, but the resources necessary to satisfy those wants are limited. Thus, every society is faced with the identical problem, the problem of scarcity.

A **resource** is anything that can be used to produce something else. Lists of the economy's resources usually begin with land, labor (the time

of workers), capital (machinery, buildings, and other man-made productive assets), and human capital (the educational achievements and skills of workers).

A resource is scarce when there's not enough of the resource available to satisfy all the ways a society wants to use it. There are many scarce resources. These include natural resources – resources that come from the physical environment, such as minerals, lumber, and petroleum. There is also a limited quantity of human resources – labor, skill, and intelligence. And in a growing world economy with a rapidly increasing human population, even clean air and water have become scarce resources.

Just as individuals must make choices, the scarcity of resources means that society, as a whole must make choices. One way a society makes choices is by allowing them to emerge as the result of many individual choices, which is what usually happens in a market economy.

But for various reasons, there are some decisions that a society decides are best not left to individual choice. For example, you live in an area that until recently was mainly farmland but is now being rapidly built up. Most local residents feel that the community would be a more pleasant place to live if some of the land was left undeveloped. But no individual has an incentive to keep his or her land as open space, rather than sell it to a developer. So a trend has emerged in many communities across country of local governments purchasing undeveloped land and preserving it as open space. Why decisions about how to use scarce resources are often best left to individuals but sometimes should be made at a higher, community-wide, level.

Principle №2: The true cost of something is its opportunity cost

The opportunity cost of an item – what you must give up in order to get it – is its true cost. Every choice we make means forgoing some other alternative.

The concept of opportunity cost is crucial to understanding individual choice because, in the end, all costs are opportunity costs. That's because every choice you make means forgoing some other alternative.

Principle №3: “How Much” is a decision at the margin

Some important decisions involve an “either-or” choice – for example, you decide either to go to college or to begin working; you decide either to take economics or to take something else. But other important decisions involve “how much” choices – for example, if you are taking economics and, may be, chemistry this semester, you must decide how much time to spend studying for each.

When it comes to understanding “how much” decisions, economics has an important insight to offer: “how much” is a decision made at the margin.

Example: Suppose, you are taking both economics and chemistry. And you are a pre-med student, so your grade in chemistry matters more to you than your grade in economics. Does that imply that you should spend all your study time only on chemistry? Probably not: even if you think your chemistry grade is more important, you should put some effort into studying economics. Spending more time studying chemistry involves a benefit (a higher expected grade in that course) and a cost (you could have spent that time doing something else, such as studying to get a higher grade in economics). That is, your decision involves a trade-off – a comparison of costs and benefits.

Decisions of this type – whether to do a bit more or a bit less of an activity, like what to do with your next hour, your next dollar, and so on – are marginal decisions. This brings us to our third principle of individual choice:

“How much” decisions require making trade-offs at the margin: comparing the costs and benefits of doing a little bit more of an activity versus doing a little bit less.

The study of such decisions is known as marginal analysis. Marginal analysis plays a central role in economics because it is the key to deciding “how much” of an activity to do.

Principle №4: People usually respond to Incentives, exploiting opportunities to make themselves better off

When we try to predict how individuals will behave in an economic situation, we may think that they will respond to incentives –

that is, exploit opportunities to make themselves better off. In fact, the principle that people will exploit opportunities to make themselves better off is the basis of all predictions by economists about individual behavior. For example, If the price of gasoline rises and stays high for an extended period of time, we can expect people to buy smaller and more fuel-efficient cars.

In addition, economists are skeptical of any attempt to change people's behavior that doesn't change their incentives. For example, a plan that calls on manufacturers to reduce pollution voluntarily probably won't be effective because it hasn't changed manufacturers' incentives. In contrast, a plan that gives them a financial reward to reduce pollution is a lot more likely to work because it has changed their incentives.

Principle №5: There are gains from Trade

Why do the choices I make interact with the choices you make? A family could try to take care of all its own needs – growing its own food, sewing its own clothing, providing itself with entertainment and so on. But trying to live that way would be very hard. The key to a much better standard of living for everyone is trade, in which people divide tasks among themselves and each person provides a good or service that other people want in return for different goods and services that he or she wants. The reason we have an economy, not many self-sufficient individuals, is that there are gains from trade: by dividing tasks and trading, two people (or more people) can each get more of what they want, than they could get by being self-sufficient. This leads us to our fifth principle: *There are gains from trade.*

Gains from trade arise from this division of tasks, which economists call specialization– a situation in which different people each engage in a different task, specializing in those tasks that they are good at performing.

Principle №6: Markets move toward Equilibrium

The economic equilibrium (market equilibrium, sometimes also just equilibrium) is a state of the economy in which the demand and the supply of goods and services are in an even state.

Consumers and producers react differently to price changes. Higher prices tend to reduce demand while encouraging supply, and lower prices increase demand while discouraging supply.

Principle №7: Resources Should Be Used Efficiently to Achieve Society's Goals

Suppose you are taking a course in which the classroom is too small for the number of students – many people are forced to stand or sit on the floor – despite the fact that large, empty classrooms are available nearby. You would say, correctly, that this is no way to run a college. Economists would call this an *inefficient* use of resources. But if an inefficient use of resources is undesirable, just what does it mean to use resources *efficiently*? You might imagine that the efficient use of resources has something to do with money. But in economics, as in life, money is only a means to other ends. The measure that economists really care about is not money but people's happiness or welfare. Economists say that *an economy's resources are used efficiently when they are used in a way that has fully exploited all opportunities to make everyone better off*. To put it another way, an economy is *efficient* if it takes all opportunities to make some people better off without making other people worse off.

When an economy is efficient, it is producing the maximum gains from trade possible given the resources available. Why? Because there is no way to rearrange how resources are used in a way that can make everyone better off. When an economy is efficient, one person can be made better off by rearranging how resources are used only by making someone else worse off.

We can now state our seventh principle: ***Resources should be used as efficiently as possible to achieve society's goals.***

Should economic policy makers always strive to achieve economic efficiency? Well, not quite, because efficiency is only a means to achieving society's goals. Sometimes efficiency may conflict with a goal that society has deemed worthwhile to achieve.

For example, in most societies, people also care about issues of equity. And there is typically a trade-off between equity and efficiency:

policies that promote equity often come at a cost of decreased efficiency in the economy, and vice versa.

Principle №8: Markets Usually Lead to Efficiency

Why markets are usually good at making sure that resources are used well. The most basic reason is that in a market economy, in which individuals are free to choose what to consume and what to produce, people normally take opportunities for mutual gain – that is, gains from trade.

If there is a way in which some people can be made better off, people will usually be able to take advantage of that opportunity. And that is exactly what defines efficiency: all the opportunities to make some people better off without making other people worse off have been exploited. This gives rise to our eighth principle: *Because people usually exploit gains from trade, markets usually lead to efficiency.*

Principle №9: When markets don't achieve efficiency, Government intervention can improve society's welfare

That is, when markets go wrong, an appropriately designed government policy can sometimes move society closer to an efficient outcome by changing how society's resources are used.

Principle №10: One person's spending is another person's income

In 2006, home construction in America began a rapid decline because builders found it increasingly hard to make sales. Over time the slump spread into just about every part of the economy, with consumer spending falling across the board. But why should a fall in home construction mean empty stores in the shopping malls?

The answer is that lower spending on construction led to lower incomes throughout the economy; people who had been employed in construction, producing goods and services builders need, or in producing goods and services new homeowners need, either lost their jobs or were forced to take pay cuts. And as incomes fell, so did spending by consumers. This example illustrates our tenth principle: *One person's spending is another person's income.*

In a market economy, people make a living selling things –

including their labor – to other people. If some group in the economy decides, for whatever reason, to spend more, the income of other groups will rise. If some group decides to spend less, the income of other groups will fall.

Principle №11: Overall spending sometimes gets out of line with the economy's productive capacity

Macroeconomics emerged as a separate branch of economics in the 1930s, when a collapse of consumer and business spending, a crisis in the banking industry, and other factors led to a plunge in overall spending. This plunge in spending, in turn, led to a period of very high unemployment known as the Great Depression.

The lesson economists learned from the troubles of the 1930s is that overall spending – the amount of goods and services that consumers and businesses want to buy – sometimes doesn't match the amount of goods and services the economy is capable of producing. In the 1930s, spending fell far short of what was needed to keep American workers employed, and the result was a severe economic slump. In fact, shortfalls in spending are responsible for most, though not all, recessions.

It's also possible for overall spending to be too high. In that case, the economy experiences *inflation*, a rise in prices throughout the economy. This rise in prices occurs because when the amount that people want to buy outstrips the supply, producers can raise their prices and still find willing customers.

Taking account of both shortfalls in spending and excesses in spending brings us to our eleventh principle: ***Overall spending sometimes gets out of line with the economy's productive capacity.***

Principle №12: Government policies can change spending

Overall spending sometimes gets out of line with the economy's productive capacity. But can anything be done about that? Yes – which leads to our twelfth and last principle: ***Government policies can change spending.***

In fact, government policies can dramatically affect spending.

For one thing, the government itself does a lot of spending on everything from military equipment to education – and it can choose to do more or less. The government can also vary how much it collects from the public in taxes, which in turn affects how much income consumers and businesses have left to spend. And the government’s control of the quantity of money in circulation, it turns out, gives it another powerful tool with which to affect total spending. Government spending, taxes, and control of money are the tools of *macroeconomic policy*.

Modern governments deploy these macroeconomic policy tools in an effort to manage overall spending in the economy, trying to steer it between the perils of recession and inflation. These efforts aren’t always successful – recessions still happen, and so do periods of inflation. But it’s widely believed that aggressive efforts to sustain spending in 2008 and 2009 helped prevent the financial crisis of 2008 from turning into a full-blown depression.

Summary

1. All economic analysis is based on a set of basic principles that apply to three levels of economic activity. First, we study how individuals make choices; second, we study how these choices interact; and third, we study how the economy functions overall.

2. Everyone has to make choices about what to do and what *not* to do. Individual choice is the basis of economics – if it doesn’t involve choice, it isn’t economics.

3. The reason choices must be made is that resources – anything that can be used to produce something else – are scarce. Individuals are limited in their choices by money and time; economies are limited by their supplies of human and natural resources.

4. Because you must choose among limited alternatives, the true cost of anything is what you must give up to get it – all costs are opportunity costs.

5. Many economic decisions involve questions not of “whether” but of “how much” – how much to spend on some good, how much to produce, and so on. Such decisions must be made by performing a trade-

off *at the margin* – by comparing the costs and benefits of doing a bit more or a bit less. Decisions of this type are called marginal decisions, and the study of them, marginal analysis, plays a central role in economics.

6. The study of how people *should* make decisions is also a good way to understand actual behavior. Individuals usually respond to incentives – exploiting opportunities to make themselves better off.

7. The next level of economic analysis is the study of interaction – how my choices depend on your choices, and vice versa. When individuals interact, the end result may be different from what anyone intends.

8. Individuals interact because there are gains from trade: by engaging in the trade of goods and services with one another, the members of an economy can all be made better off. Specialization – each person specializes in the task he or she is good at – is the source of gains from trade.

9. Because individuals usually respond to incentives, markets normally move toward equilibrium – a situation in which no individual can make himself or herself better off by taking a different action.

10. An economy is efficient if all opportunities to make some people better off without making other people worse off are taken. Resources should be used as efficiently as possible to achieve society's goals. But efficiency is not the sole way to evaluate an economy: equity, or fairness, is also desirable, and there is often a trade-off between equity and efficiency.

11. Markets usually lead to efficiency, with some well defined exceptions.

12. When markets fail and do not achieve efficiency, government intervention can improve society's welfare.

13. Because people in a market economy earn income by selling things, including their own labor, one person's spending is another person's income. As a result, changes in spending behavior can spread throughout the economy.

14. Overall spending in the economy can get out of line with the

economy's productive capacity. Spending below the economy's productive capacity leads to a recession; spending in excess of the economy's productive capacity leads to inflation.

15. Governments have the ability to strongly affect overall spending, an ability they use in an effort to steer the economy between recession and inflation.

2) FACTORS OF PRODUCTION

The 4 factors of production are one of the foundations of economic activity. They describe all the inputs or resources that are used in the production of goods and services.

The factors of production include natural resources, human resources, capital and entrepreneurship.

Each factor of production has a place in economic system, and each has a particular function. People who own or use a factor of production are expecting a «return or reward». This generates income which, as it is spent, becomes a kind of fuel that drives the economy.

Natural Resources or «LAND»

Land as a factor of production is sometimes also referred to as natural resources. It includes all naturally-occurring resources such as soil, water, air, plants, etc. that can be used in the production process. Land has three important characteristics: (1) its quantity is fixed, (2) it is immobile, which means it cannot be moved, and (3) it is passive in nature, because it cannot produce anything on its own. The price paid for the use of land is called rent. Rent becomes income to the owner of the land.

Natural resources are the things provided by nature that go into the creation of goods and services. They include such things as minerals, wildlife and timber (древесина) resources. Economists also use the term «land» when they speak of natural resources as a factor of production.

Human Resources or «LABOR»

Labor as a factor of production refers to the human effort that is used in the production of goods and services. It includes all physical and mental efforts that are made by employees during the production

process. The employees receive wages in exchange for their efforts. Wages are a critical aspect, because they are necessary in order to be able to distinguish between labor and leisure activities.

Economists call the physical and mental effort that people put into the creation of goods and services *labor*. The price paid for the use of labor is called *wages*. Wages represent income to workers, who own their labor.

Capital

Capital as a factor of production describes all man-made goods that are used in the production process. The capital stock may include goods such as machinery, tools, vehicles, semi-finished products, etc. It is important to note that capital is by definition a derived factor of production, since it requires the combination of land and labor (i.e. the other two factors of production).

To the economist, physical capital (or «capital» as it is commonly called) is something created by people to produce other goods and services. A factory, tools and machines are capital resources because they can be used to produce other goods and services.

The term *capital* is often used by business people to refer to money they can use to buy factories, machinery and other similar productive resources. Payment for the use of someone else's money, or capital, is called *interest*.

Entrepreneurship

Closely associated with labor is the concept of entrepreneurship, the managerial or organizational skills needed by most firms to produce goods and services. The entrepreneur brings together the other three factors of production. When they are successful, entrepreneurs earn profits. When they are not successful, they suffer losses.

The reward to entrepreneurs for the risks, innovative ideas and efforts that they have put into the business, they obtain the money that remains after the owners of land, labor and capital have received their payments.

Even though entrepreneurship is not part of the classical factors of production, it is often added to the list as a fourth factor. The reasoning

behind this is that entrepreneurship often leads to innovation, new processes or new products. Hence, it can increase production efficiency and act as a factor of production.

The basic economic problem

The central problem of economics is to determine the most efficient ways to allocate the factors of production and solve the problem of scarcity created by society's unlimited wants and limited resources. In doing so, every society must provide answers to the following three questions:

1. What goods and services are to be produced, and in what quantities are they to be produced?
2. How are those goods and services to be produced?
3. Who will receive and consume (get to use) those goods and services?

The solution of these questions depends on the economic system of each particular society.

3) MICROECONOMICS AND MACROECONOMICS

Macroeconomics

Economists have two ways of looking at economics and the economy. One is the *macro* approach, other is the *micro*. Macroeconomics and microeconomics, a pair of terms coined by Ragnar Frisch, are the two most general fields in economics.

Macroeconomics is a branch of economics that studies how an overall economy – the market systems that operate on a large scale – behaves. Macroeconomics studies economy-wide phenomena such as inflation, price levels, rate of economic growth, national income, gross domestic product (GDP), and changes in unemployment.

Macroeconomics is the study of the economy as a whole. Macroeconomics is a branch of economics dealing with the performance, structure, behavior, and decision-making of an economy as a whole.

Macroeconomists study aggregated indicators such as GDP, unemployment rates, national income, price indices, and the

interrelations among the different sectors of the economy to better understand how the whole economy functions.

Macroeconomists develop models that explain the relationship between such factors as national income, output, consumption, unemployment, inflation, savings, investment, international trade and international finance.

Some of the key questions addressed by macroeconomics include:

What causes unemployment?

What causes inflation?

What creates or stimulates economic growth?

Macroeconomics attempts to measure how well an economy is performing, to understand what forces drive it, and to project how performance can improve.

Macroeconomics deals with the performance, structure, and behavior of the entire economy, in contrast to microeconomics, which is more focused on the choices made by individual actors in the economy (like people, households, industries, etc.).

Microeconomics

Microeconomics is the branch of economics that studies the behavior of individuals and firms in making decisions and the interactions among these individuals and firms in narrowly-defined markets. Microeconomics also deals with the effects of economic policies (such as changing taxation levels) on the aforementioned aspects of the economy.

One goal of microeconomics is to analyze the market mechanisms that establish relative prices among goods and services and allocate limited resources among alternative uses. Microeconomics shows conditions under which free markets lead to desirable allocations. It also analyzes market failure, where markets fail to produce efficient results.

Microeconomists may investigate individual markets or even the economy as a whole, but their analyses are derived from the aggregation of the behavior of individual units.

Microeconomic theory is used extensively in many areas of applied economics. For example, it is used in industrial organization,

labor economics, international trade, cost-benefit analysis, and many other economic subfields. The tools and analyses of microeconomics provide a common ground, and even a language, for economists interested in a wide range of problems.

Optimization plays a key role in microeconomics. The consumer is assumed to maximize utility or satisfaction subject to the constraints imposed by income or income earning power. The producer is assumed to maximize profit or minimize cost subject to the technological constraints under which the firm operates. Optimization of social welfare sometimes is the criterion for the determination of public policy.

Opportunity cost is an important concept in microeconomics. Many courses of action are valued in terms of what is sacrificed so that they might be undertaken. For example, the opportunity cost of a public project is the value of the additional goods that the private sector would have produced with the resources used for the public project.

4) ECONOMIC SYSTEMS

An economic system is a system of production, resource allocation and distribution of goods and services within a society or a given geographic area.

It includes the combination of the various institutions, agencies, entities, decision-making processes and patterns of consumption that comprise the economic structure of a given community.

An economic system is a type of social system. The mode of production is a related concept.

All economic systems have three basic questions to ask: what to produce, how to produce and in what quantities and who receives the output of production.

There are three main economic systems:

1. Planned economy.
2. Mixed economy.
3. Market economy.

1. Planned economy.

Planned economies are economies with a large amount of central

planning and direction, when the government takes all the decisions; the government decides production and consumption.

The actual system employed varies from state to state, but command or planned economies have a number of common features.

Firstly, the state decides, precisely what the nation is to produce. It usually plans five years ahead. It is the intention of the planners that there should be enough goods and services for all.

Secondly, industries are asked to comply with these plans and each industry and factory is set a production target to meet.

If each factory and farm meets its target, then the state will meet its targets as set out in the five-year plans.

It does, however, have a number of advantages:

1) Everyone in society receives enough goods and services to enjoy a basic standard of living.

2) Nations do not waste resources duplicating production.

3) The state can use its control of the economy to divert resources to wherever it wants. As a result, it can ensure that everyone receives a good education, proper health care or that transport is available.

Several disadvantages also exist. It is these disadvantages that have led to many nations abandoning planned economies over recent years:

1) There is no incentive for individuals to work hard in planned economies.

2) Any profits that are made are paid to the government.

3) Citizens cannot start their own businesses and so new ideas rarely come forward.

4) As a result, industries in planned economies can be very inefficient.

2. Mixed economy.

There is no precise definition of a "mixed economy". Theoretically, it may refer to an economic system that combines one of three characteristics: public and private ownership of industry, market-based allocation with economic planning, or free markets with state interventionism. A mixed economy contains elements of both market and planned economies.

The aim of mixed economies is to avoid the disadvantages of both systems while enjoying the benefits that they both offer.

3. Market economy.

In a true market economy the government plays no role in the management of the economy, the government does not intervene in it. The system is based on private enterprise with private ownership of the means of production and private supplies of capital, which can be defined as surplus income available for investment in new business activities.

So we can say that the following six characteristics define a market economy.

1. Private Property.
2. Freedom of Choice.
3. Motive of Self-Interest.
4. Competition.
5. System of Markets and Prices.
6. Limited Government.

But there are also Disadvantages of a Market Economy.

1. It leads to huge gap between rich and poor as rich keep earning money and since government does not intervene there is no way poor can bridge that gap which is the reason why one seldom finds out a completely free market economy.

2. It gives undue advantage to wealthy individuals, as government does not intervene, which leads to monopoly like situation in the economy, which in turn leads to exploitation of consumers.

3. People produce those products and services which lead to profits without giving any consideration to its impact on society or environment so if there is profit in producing nuclear weapons that they will do it regardless of its impact on people.

5) HISTORY OF ECONOMIC THOUGHT

Economic writings date from earlier Mesopotamian, Greek, Roman, Indian subcontinent, Chinese, Persian, and Arab civilizations. Economic precepts occur throughout the writings of the Boeotian poet

Hesiod and several economic historians have described Hesiod himself as the “first economist”. Other notable writers from Antiquity through to the Renaissance include Aristotle, Xenophon, Chanakya (also known as Kautilya), Qin Shi Huang, Thomas Aquinas, and Ibn Khaldun. Joseph Schumpeter described Aquinas as “coming nearer than any other group to being the ‘founders’ of scientific economics” as to monetary, interest, and value theory within a natural-law perspective.

Two groups, later called “mercantilists” and “physiocrats”, more directly influenced the subsequent development of the subject. Both groups were associated with the rise of economic nationalism and modern capitalism in Europe. Mercantilism was an economic doctrine that flourished from the 16th to 18th century in a prolific pamphlet literature, whether of merchants or statesmen. It held that a nation's wealth depended on its accumulation of gold and silver. Nations without access to mines could obtain gold and silver from trade only by selling goods abroad and restricting imports other than of gold and silver. The doctrine called for importing cheap raw materials to be used in manufacturing goods, which could be exported, and for state regulation to impose protective tariffs on foreign manufactured goods and prohibit manufacturing in the colonies.

Physiocrats, a group of 18th-century French thinkers and writers, developed the idea of the economy as a circular flow of income and output. Physiocrats believed that only agricultural production generated a clear surplus over cost, so that agriculture was the basis of all wealth. Thus, they opposed the mercantilist policy of promoting manufacturing and trade at the expense of agriculture, including import tariffs. Physiocrats advocated replacing administratively costly tax collections with a single tax on income of land owners. In reaction against copious mercantilist trade regulations, the physiocrats advocated a policy of *laissez-faire*, which called for minimal government intervention in the economy.

Adam Smith (1723-1790) was an early economic theorist. Smith was harshly critical of the mercantilists but described the physiocratic system “with all its imperfections” as “perhaps the purest approximation

to the truth that has yet been published” on the subject.

Classical political economy

The publication of Adam Smith's *The Wealth of Nations* in 1776, has been described as “the effective birth of economics as a separate discipline.” The book identified land, labor, and capital as the three factors of production and the major contributors to a nation's wealth, as distinct from the physiocratic idea that only agriculture was productive.

Smith discusses potential benefits of specialization by division of labor, including increased labor productivity and gains from trade, whether between town and country or across countries. His “theorem” that “the division of labor is limited by the extent of the market” has been described as the “core of a theory of the functions of firm and industry” and a “fundamental principle of economic organization.” To Smith has also been ascribed “the most important substantive proposition in all of economics” and foundation of resource-allocation theory – that, under competition, resource owners (of labor, land, and capital) seek their most profitable uses, resulting in an equal rate of return for all uses in equilibrium (adjusted for apparent differences arising from such factors as training and unemployment).

In an argument that includes “one of the most famous passages in all economics,” Smith represents every individual as trying to employ any capital they might command for their own advantage, not that of the society, and for the sake of profit, which is necessary at some level for employing capital in domestic industry, and positively related to the value of produce. In this:

He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to

promote it.

While Adam Smith emphasized the production of income, David Ricardo (1817) focused on the distribution of income among landowners, workers, and capitalists. Ricardo saw an inherent conflict between landowners on the one hand and labor and capital on the other. He posited that the growth of population and capital, pressing against a fixed supply of land, pushes up rents and holds down wages and profits. Ricardo was the first to state and prove the principle of comparative advantage, according to which each country should specialize in producing and exporting goods in that it has a lower relative cost of production, rather relying only on its own production. It has been termed a “fundamental analytical explanation” for gains from trade.

Coming at the end of the classical tradition, John Stuart Mill (1848) parted company with the earlier classical economists on the inevitability of the distribution of income produced by the market system. Mill pointed to a distinct difference between the market's two roles: allocation of resources and distribution of income. The market might be efficient in allocating resources but not in distributing income, he wrote, making it necessary for society to intervene.

Value theory was important in classical theory. Smith wrote that the “real price of every thing... is the toil and trouble of acquiring it”. Smith maintained that, with rent and profit, other costs besides wages also enter the price of a commodity. Other classical economists presented variations on Smith, termed the “labour theory of value”. Classical economics focused on the tendency of any market economy to settle in a final stationary state made up of a constant stock of physical wealth (capital) and a constant population size.

Marxism

Marxist (later, Marxian) economics descends from classical economics. It derives from the work of Karl Marx. The first volume of Marx's major work, *Das Kapital*, was published in German in 1867. In it, Marx focused on the labor theory of value and the theory of surplus value which, he believed, explained the exploitation of labor by capital. The labor theory of value held that the value of an exchanged

commodity was determined by the labor that went into its production and the theory of surplus value demonstrated how the workers only got paid a proportion of the value their work had created.

Neoclassical economics

At the dawn as a social science, **economics** was defined and discussed at length as the study of production, distribution, and consumption of wealth by Jean-Baptiste Say in his *Treatise on Political Economy or, The Production, Distribution, and Consumption of Wealth*(1803). These three items are considered by the science only in relation to the increase or diminution of wealth, and not in reference to their processes of execution. Say's definition has prevailed up to our time, saved by substituting the word “wealth” for “goods and services” meaning that wealth may include non-material objects as well. One hundred and thirty years later, Lionel Robbins noticed that this definition no longer sufficed, because many economists were making theoretical and philosophical inroads in other areas of human activity. In his *Essay on the Nature and Significance of Economic Science*, he proposed a definition of economics as a study of a particular aspect of human behavior, the one that falls under the influence of scarcity, which forces people to choose, allocate scarce resources to competing ends, and economize (seeking the greatest welfare while avoiding the wasting of scarce resources). For Robbins, the insufficiency was solved, and his definition allows us to proclaim, with an easy conscience, education economics, safety and security economics, health economics, war economics, and of course, production, distribution and consumption economics as valid subjects of the economic science.

Citing Robbins: “Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses”. After discussing it for decades, Robbins' definition became widely accepted by mainstream economists, and it has opened way into current textbooks. Although far from unanimous, most mainstream economists would accept some version of Robbins' definition, even though many have raised serious objections to the scope and method of economics, emanating from that definition. Due to the

lack of strong consensus, and that production, distribution and consumption of goods and services is the prime area of study of economics, the old definition still stands in many quarters.

A body of theory later termed “neoclassical economics” or “marginalism” formed from about 1870 to 1910. The term “economics” was popularized by such neoclassical economists as Alfred Marshall as a concise synonym for “economic science” and a substitute for the earlier “political economy”. This corresponded to the influence on the subject of mathematical methods used in the natural sciences.

Neoclassical economics systematized supply and demand as joint determinants of price and quantity in market equilibrium, affecting both the allocation of output and the distribution of income. It dispensed with the labor theory of value inherited from classical economics in favour of a marginal utility theory of value on the demand side and a more general theory of costs on the supply side. In the 20th century, neoclassical theorists moved away from an earlier notion suggesting that total utility for a society could be measured in favour of ordinal utility, which hypothesizes merely behavior-based relations across persons.

In microeconomics, neoclassical economics represents incentives and costs as playing a pervasive role in shaping decision making. An immediate example of this is the consumer theory of individual demand, which isolates how prices (as costs) and income affect quantity demanded. In macroeconomics it is reflected in an early and lasting neoclassical synthesis with Keynesian macroeconomics.

Neoclassical economics is occasionally referred as orthodox economics whether by its critics or sympathizers. Modern mainstream economics builds on neoclassical economics but with many refinements that either supplement or generalize earlier analysis, such as econometrics, game theory, analysis of market failure and imperfect competition, and the neoclassical model of economic growth for analyzing long-run variables affecting national income.

Neoclassical economics studies the behavior of individuals, households, and organizations (called economic actors, players, or agents), when they manage or use scarce resources, which have

alternative uses, to achieve desired ends. Agents are assumed to act rationally, have multiple desirable ends in sight, limited resources to obtain these ends, a set of stable preferences, a definite overall guiding objective, and the capability of making a choice. There exists an economic problem, subject to study by economic science, when a decision (choice) is made by one or more resource-controlling players to attain the best possible outcome under bounded rational conditions. In other words, resource-controlling agents maximize value subject to the constraints imposed by the information the agents have, their cognitive limitations, and the finite amount of time they have to make and execute a decision. Economic science centers on the activities of the economic agents that comprise society. They are the focus of economic analysis.

Keynesian economics

Keynesian economics derives from John Maynard Keynes, in particular his book *The General Theory of Employment, Interest and Money* (1936), which ushered in contemporary macroeconomics as a distinct field. The book focused on determinants of national income in the short run when prices are relatively inflexible. Keynes attempted to explain in broad theoretical detail why high labor-market unemployment might not be self-correcting due to low “effective demand” and why even price flexibility and monetary policy might be unavailing. The term “revolutionary” has been applied to the book in its impact on economic analysis.

Keynesian economics has two successors. Post-Keynesian economics also concentrates on macroeconomic rigidities and adjustment processes. Research on micro foundations for their models is represented as based on real-life practices rather than simple optimizing models. It is generally associated with the University of Cambridge and the work of Joan Robinson.

New-Keynesian economics is also associated with developments in the Keynesian fashion. Within this group researchers tend to share with other economists the emphasis on models employing micro foundations and optimizing behavior but with a narrower focus on standard Keynesian themes such as price and wage rigidity. These are usually

made to be endogenous features of the models, rather than simply assumed as in older Keynesian-style ones.

SUPPLY AND DEMAND

- 1) What a competitive market is and how it is described by the supply and demand model?
- 2) The demand schedule and the demand curve.
- 3) Shifts of the demand curve.
- 4) Shifts of the supply curve
- 5) In the case of a shortage or surplus, how price moves the market back to equilibrium?

1) WHAT A COMPETITIVE MARKET IS AND HOW IT IS DESCRIBED BY THE SUPPLY AND DEMAND MODEL?

All societies necessarily make economic choices. Society needs to make choices about, what should be produced, how should those goods and services be produced, and whom is allowed to consumes those goods and services. For conventional economics the market by way of the operation of supply and demand answer these questions. Under conditions of competition, where no one has the power to influence or set price, the market determines the price of a product, and the price determines what is produced, and who can afford to consume it.

Price provides the incentive to both the consumer and producer. High prices encouraged more production by the producers, but less consumption by the consumers. Low prices discourage production by the producer, and encouraged consumption by the consumers. Both incentives push the price to balance the forces of consumption (demand) and production (supply). Economists call this balance: equilibrium.

The supply and demand mechanism (the economic model) besides being the natural consequences of economic forces provides the most efficient economic outcomes possible. Satisfaction for society is maximized, at minimum cost.

Supply and Demand: A Model of a Competitive Market

So, What a competitive market is?

There are three characteristics of a competitive market:

1. There are many buyers and many sellers in the market.
2. The goods offered by the various sellers are largely the same.

3. Firms can freely enter or exit the market.

There are **five key elements** in this model:

1. The demand curve.

2. The supply curve.

3. The set of factors that cause the demand curve to shift and the set of factors that cause the supply curve to shift.

4. The market equilibrium, which includes the equilibrium price and equilibrium quantity.

5. The way the market equilibrium changes when the supply curve or demand curve shifts.

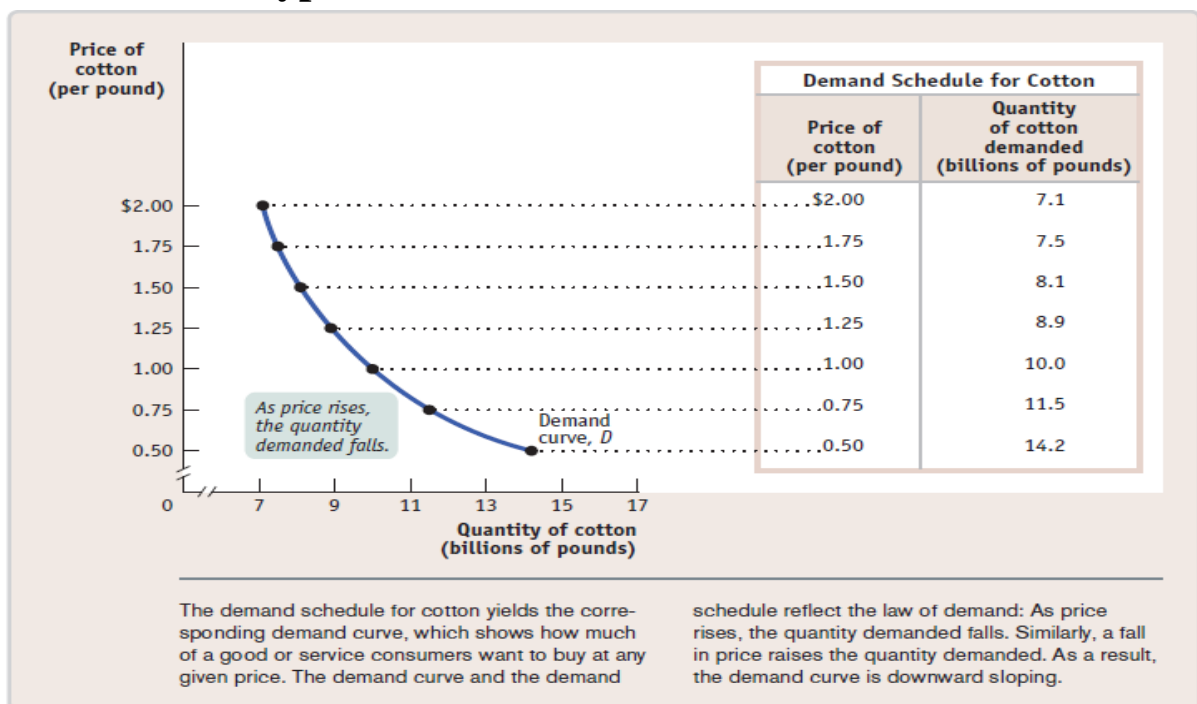
To understand the supply and demand model, we will examine each of these elements.

2) THE DEMAND SCHEDULE AND THE DEMAND CURVE

A demand schedule is a table showing how much of a good or service consumers will want to buy at different prices.

The quantity demanded is the actual amount of a good or service consumers are willing to buy at some specific price.

A hypothetical demand schedule for cotton



On this figure we can see *a* hypothetical demand schedule for cotton. It's hypothetical in that it doesn't use actual data on the world demand for cotton and it assumes that all cotton is of equal quality.

According to the table, if a pound of cotton costs \$1, consumers around the world will want to purchase 10 billion pounds of cotton over the course of a year. If the price is \$1.25 a pound, they will want to buy only 8.9 billion pounds; if the price is only \$0.75 a pound, they will want to buy 11.5 billion pounds; and so on.

The higher the price, the fewer pounds of cotton consumers will want to purchase. So, as the price rises, the quantity demanded of cotton – the actual amount consumers are willing to buy at some specific price – falls.

The graph in this figure is a visual representation of the information in the table. The vertical axis shows the price of a pound of cotton and the horizontal axis shows the quantity of cotton in pounds. Each point on the graph corresponds to one of the entries in the table. The curve that connects these points is a demand curve.

A demand curve is a graphical representation of the **demand schedule**, another way of showing the relationship between the quantity demanded and price.

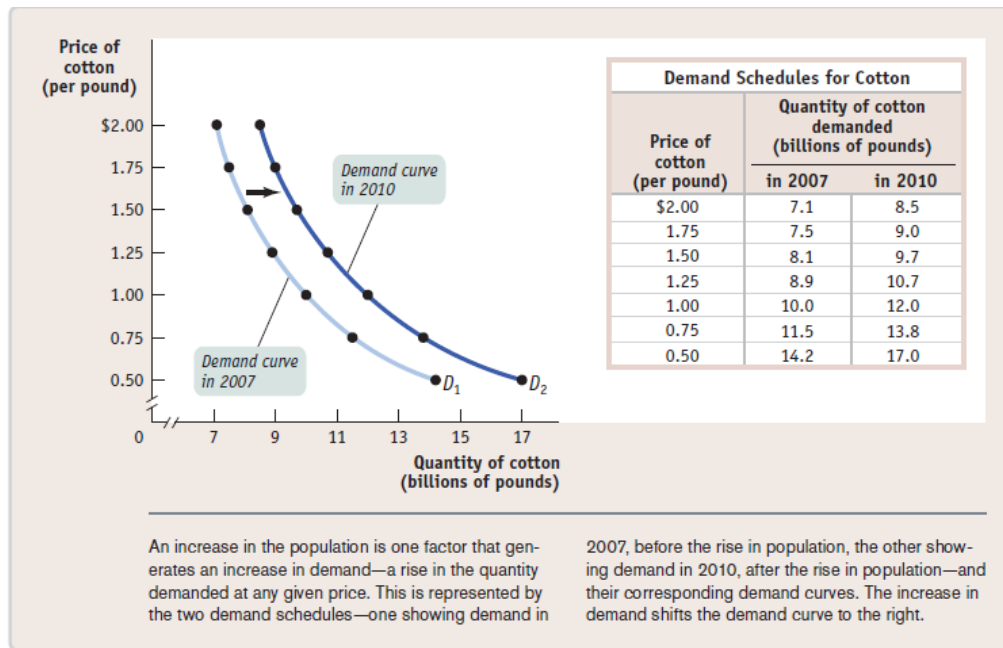
The **law of demand** says that a higher price for a good or service, other things equal, leads people to demand a smaller quantity of that good or service.

3) SHIFTS OF THE DEMAND CURVE

An increase in the population is one factor that generates an increase in demand – a rise in the quantity demanded at any given price. This is represented by the two demand schedules – one showing demand in **2007**, before the rise in population, the other showing demand in **2010**, after the rise in population – and their corresponding demand curves. The increase in demand shifts the demand curve to the right.

A shift of the demand curve is a change in the quantity demanded at any given price, represented by the change of the original demand curve to a new position, denoted by a new demand curve.

A shift of the demand curve



A movement along the demand curve is a change in the quantity demanded of a good arising from a change in the good's price.

Five shifters of demand:

1. Tastes / Preferences
2. Number of Consumers
3. Price of Related Goods
4. Income
5. Expectations

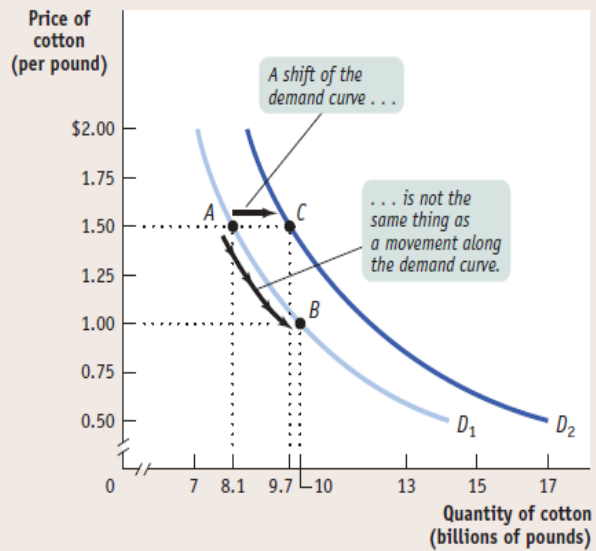
Five shifters of supply:

1. Price of Resources
2. Number of Producers
3. Technology
4. Taxes and Subsidies
5. Expectations

Movement along the demand curve versus shift of the demand

The rise in quantity demanded when going from point **A** to point **B** reflects a movement along the demand curve: it is the result of a fall in the price of the good. The rise in quantity demanded when going from point **A** to point **C** reflects a shift of the demand curve: it is the result of a rise in the quantity demanded at any given price.

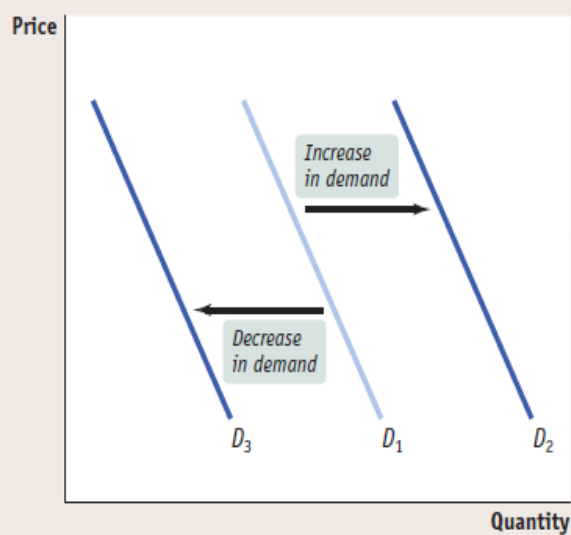
The rise in quantity demanded when going from point *A* to point *B* reflects a movement along the demand curve: it is the result of a fall in the price of the good. The rise in quantity demanded when going from point *A* to point *C* reflects a shift of the demand curve: it is the result of a rise in the quantity demanded at any given price.



Shifters of the demand curve

Any event that increases demand shifts the demand curve to the right, reflecting a rise in the quantity demanded at any given price. Any event that decreases demand shifts the demand curve to the left, reflecting a fall in the quantity demanded at any given price.

Any event that increases demand shifts the demand curve to the right, reflecting a rise in the quantity demanded at any given price. Any event that decreases demand shifts the demand curve to the left, reflecting a fall in the quantity demanded at any given price.



Understanding shifts of the demand curve

Economists believe that there are five principal factors that shift the demand curve for a good or service:

1. Changes in the prices of related goods or services
2. Changes in income

3. Changes in tastes
4. Changes in expectations
5. Changes in the number of consumers

Although this is not an exhaustive list contains the five most important factors that can shift demand curves. So when we say that the quantity of a good or service demanded falls as its price rises, other things equal, we are in fact stating that the factors that shift demand are remaining unchanged. Let's now explore, in more detail, how those factors shift the demand curve.

1. Changes in the prices of related goods or services

A pair of goods are substitutes if a rise in the price of one good makes consumers more willing to buy the other good. Substitutes are usually goods that in some way serve a similar function: coffee and tea, train rides and air flights. A rise in the price of the alternative good induces some consumers to purchase the original good instead of it, shifting demand for the original good to the right.

But sometimes a rise in the price of one good makes consumers *less* willing to buy another good. Such pairs of goods are known as complements. **Complements** are usually goods that in some sense are consumed together: computers and software, cappuccinos and cookies, cars and gasoline. Because consumers like to consume a good and its complement together, a change in the price of one of the goods will affect the demand for its complement. In particular, when the price of one good rises, the demand for its complement decreases, shifting the demand curve for the complement to the left. So, for example, when the price of gasoline rose in 2007–2008, the demand for gas-guzzling cars fell.

Two goods are **substitutes** if a rise in the price of one of the goods leads to an increase in the demand for the other good. Two goods are **complements** if a rise in the price of one good leads to a decrease in the demand for the other good.

2. Changes in income

When individuals have more income, they are normally more likely to purchase a good at any given price. For example, if a family's

income rises, it is more likely to take that long-anticipated summer trip to Disney World – and therefore also more likely to buy plane tickets. So a rise in consumer incomes will cause the demand curves for most goods to shift to the right.

Why do we say “most goods,” not “all goods”? Most goods are normal goods—the demand for them increases when consumer income rises. However, the demand for some products falls when income rises. Goods for which demand decreases when income rises are known as **inferior goods**. Usually an inferior good is one that is considered less desirable than more expensive alternatives – such as a bus ride versus a taxi ride. When they can afford to, people stop buying an inferior good and switch their consumption to the preferred, more expensive alternative. So when a good is inferior, a rise in income shifts the demand curve to the left. And, not surprisingly, a fall in income shifts the demand curve to the right.

When a rise in income increases the demand for a good – the normal case – It is a **normal good**. When a rise in income decreases the demand for a good, it is an **inferior good**.

3. Changes in tastes

Why do people want what they want? Fortunately, we don’t need to answer that question – we just need to acknowledge that people have certain preferences, or tastes, that determine what they choose to consume and that these tastes can change.

Economists usually lump together changes in demand due to fads, beliefs, cultural shifts, and so on under the heading of changes in tastes or preferences.

When a good or service comes into fashion, its demand curve shifts to the right. By contrast, the demand curve shifts to the left, once a new trend emerges and the good or service goes out of fashion again.

4. Changes in expectations

When consumers have some choice about when to make a purchase, current demand for a good is often affected by expectations about its future price. For example, some shoppers often wait for seasonal sales – buying next year’s holiday gifts during the post-holiday

markdowns. In this case, expectations of a future drop in price lead to a decrease in demand today. Alternatively, expectations of a future rise in price are likely to cause an increase in demand today.

Expected changes in future income can also lead to changes in demand: if you expect your income to rise in the future, you will typically borrow today and increase your demand for certain goods; if you expect your income to fall in the future, you are likely to save today and reduce your demand for some goods.

People's expectations about the future can have a significant impact on demand. Or more specifically, their expectations of future prices and/or other factors that can change demand. If consumers expect prices to increase in the near future, current demand often increases, i.e., the demand curve shifts to the right.

5. Changes in the number of consumers

As a rule of thumb, a larger population results in a higher demand for most goods. As a result, the demand curve shifts to the right. For example, as the population grows, the demand for food increases as well, simply because there are more mouths to feed.

In addition to that, the composition of the population also affects the demand curve. However, this relationship is quite complex, which makes it difficult to provide general statements about the direction and magnitude of the resulting shifts. This becomes apparent when we look at a simple example: Let's say a country currently experiences a baby boom. As a consequence, the demand for diapers increases. Many years later, the population has grown old, and birthrates are down.

QUICK REVIEW

1) The supply and demand model is a model of a competitive market – one in which there are many buyers and sellers of the same good or service.

2) The demand schedule shows how the quantity demanded changes as the price changes. A demand curve illustrates this relationship.

3) The law of demand asserts that a higher price reduces the quantity demanded. Thus, demand curves normally slope downward.

4) An increase in demand leads to a rightward shift of the demand curve: the quantity demanded rises for any given price. A decrease in demand leads to a leftward shift: the quantity demanded falls for any given price. A change in price results in a change in the quantity demanded and a movement along the demand curve.

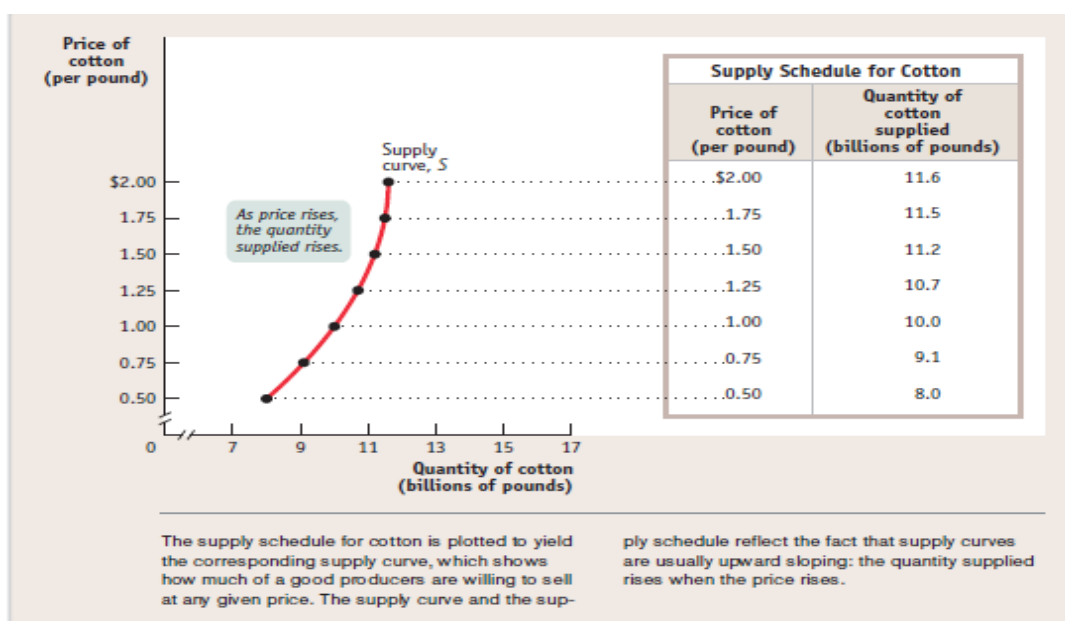
5) The five main factors that can shift the demand curve are changes in (1) the price of a related good, such as a substitute or a complement, (2) income, (3) tastes, (4) expectations, and (5) the number of consumers.

4) SHIFTS OF THE SUPPLY CURVE

Supply curve, in economics, graphic representation of the relationship between product price and quantity of product that a seller is willing and able to supply. Product price is measured on the vertical axis of the graph and quantity of product supplied on the horizontal axis.

The supply schedule and the supply curve

The **quantity supplied** is the actual amount of a good or service people are willing to sell at some specific price. A supply schedule shows how much of a good or service would be supplied at different prices.



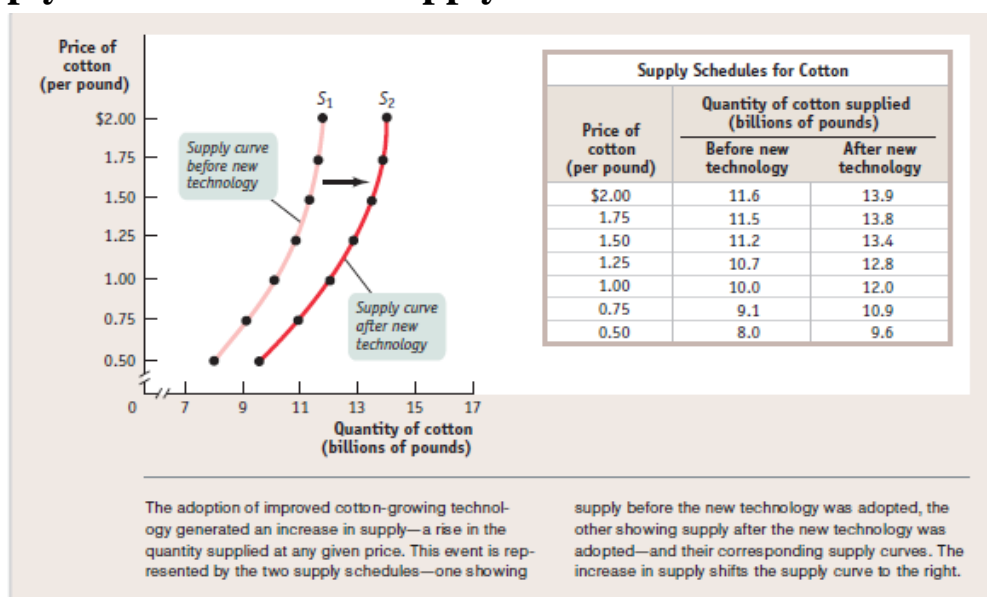
This table shows how the quantity of cotton made available varies with the price – that is, it shows a hypothetical **supply schedule** for cotton.

A **supply schedule** works the same way as the **demand schedule** shown in the figure: in this case, the table shows the number of pounds of cotton farmers are willing to sell at different prices. At a price of \$0.50 per pound, farmers are willing to sell only 8 billion pounds of cotton per year. At \$0.75 per pound, they're willing to sell 9.1 billion pounds. At \$1, they're willing to sell 10 billion pounds, and so on.

In the same way that a demand schedule can be represented graphically by a demand curve, a supply schedule can be represented by a supply curve, as shown in Each point on the curve represents an entry from the table. Suppose that the price of cotton rises from \$1 to \$1.25; we can see that the quantity of cotton farmers are willing to sell rises from 10 billion to 10.7 billion pounds. This is the normal situation for a supply curve, that a higher price leads to a higher quantity supplied. So just as demand curves normally slope downward, supply curves normally slope upward: the higher the price being offered, the more of any good or service producers will be willing to sell.

An increase in supply

Until recently, cotton remained relatively cheap over the past several decades. One reason is that the amount of land cultivated for cotton expanded over 35% from 1945 to 2007. However, the major factor accounting for cotton's relative cheapness was advances in the production technology. This figure illustrates these events in terms of the **supply schedule** and the **supply curve** for cotton.



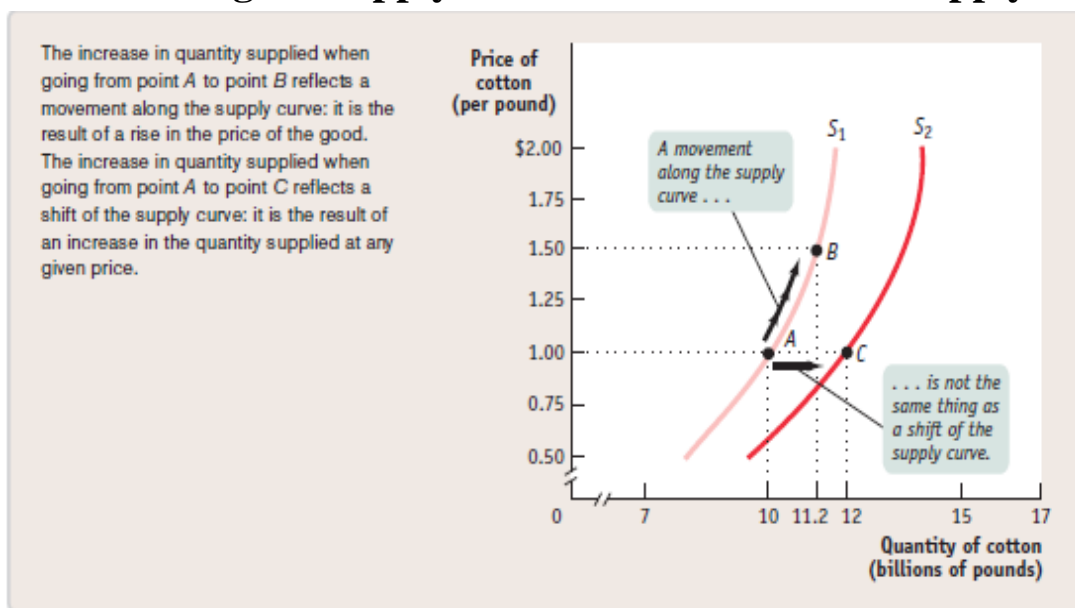
The table shows two supply schedules. The schedule *before* improved cotton-growing technology was adopted is the same one as in last Figure (the previous figure). The second schedule shows the supply of cotton *after* the improved technology was adopted. Just as a change in demand schedules leads to a shift of the demand curve, a change in supply schedules leads to a shift of the supply curve – a change in the quantity supplied at any given price. This is shown in Figure by the shift of the supply curve before the adoption of new cotton-growing technology, S_1 , to its new position after the adoption of new cotton-growing technology, S_2 . Notice that S_2 lies to the right of S_1 , a reflection of the fact that quantity supplied rises at any given price.

Shifts of the supply curve

- A supply curve shows the relationship between quantity supplied and price.
- A shift of the supply curve is a change in the quantity supplied of a good or service at any given price. It is represented by the change of the original supply curve to a new position, denoted by a new supply curve.

As in the analysis of demand, it's crucial to draw a distinction between such shifts of the supply curve and movements along the supply curve – changes in the quantity supplied arising from a change in price.

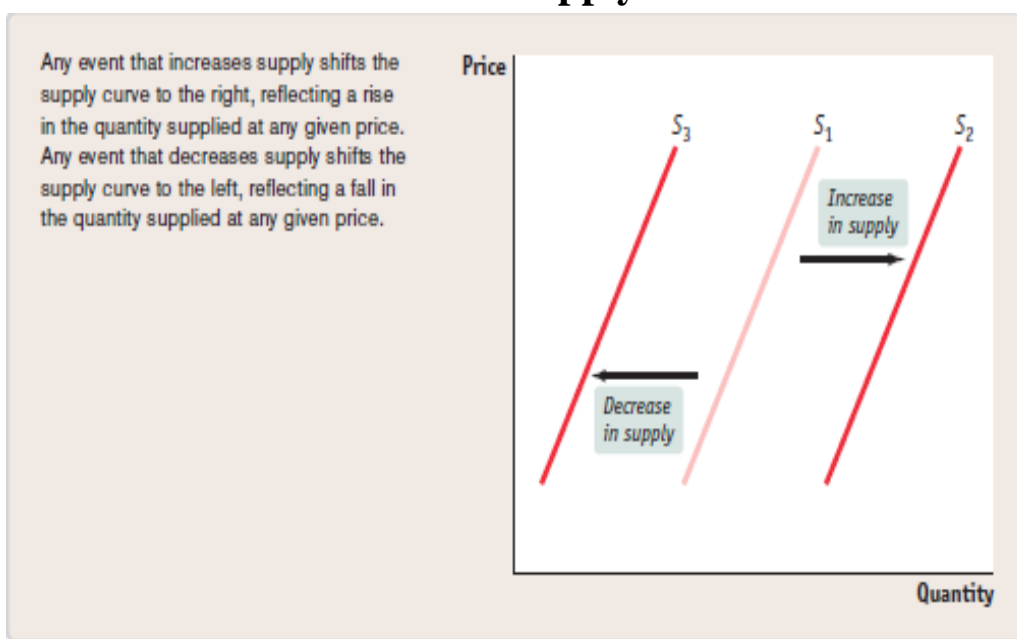
Movement along the supply curve versus shift of the supply curve



We can see this difference in Figure. The movement from point A

to point *B* is a movement along the supply curve: the quantity supplied rises along *S*₁ due to a rise in price. Here, a rise in price from \$1 to \$1.50 leads to a rise in the quantity supplied from 10 billion to 11.2 billion pounds of cotton. But the quantity supplied can also rise when the price is unchanged if there is an increase in supply – a rightward shift of the supply curve. This is shown by the rightward shift of the supply curve from *S*₁ to *S*₂. Holding the price constant at \$1, the quantity supplied rises from 10 billion pounds at point *A* on *S*₁ to 12 billion pounds at point *C* on *S*₂.

Shifts of the supply curve



This Figure illustrates the two basic ways in which supply curves can shift. When economists talk about an “increase in supply”, they mean a *rightward* shift of the supply curve: at any given price, producers supply a larger quantity of the good than before. This is shown in Figure by the rightward shift of the original supply curve *S*₁ to *S*₂. And when economists talk about a “decrease in supply”, they mean a *leftward* shift of the supply curve: at any given price, producers supply a smaller quantity of the good than before. This is represented by the leftward shift of *S*₁ to *S*₃.

Economists believe that shifts of the supply curve for a good or service are mainly the result of five factors (though, as in the case of demand, there are other possible causes):

1. Changes in input prices
2. Changes in the prices of related goods or services
3. Changes in technology
4. Changes in expectations
5. Changes in the number of producers

1. Changes in input prices

An input is anything used to produce a good or service

1) To produce an output, you need inputs (i.e. you need cream and sugar to make ice cream).

2) An increase in the price of an input makes the production of the final good more costly for those who produce and sell it

a) therefore, producers are less willing to supply the final good at any given price, and the supply curve shifts to the left.

3) A fall in the price of an input makes the production of the final good less costly for sellers

a) producers become more willing to supply the good at any given price, and the supply curve shifts to the right.

2. Changes in the prices of related goods or services

A single producer often produces a mix of goods rather than a single product. For example, an oil refinery produces gasoline from crude oil, but it also produces heating oil and other products from the same raw material. When a producer sells several products, the quantity of any one good it is willing to supply at any given price depends on the prices of its other co-produced goods.

This effect can run in either direction. An oil refiner will supply less gasoline at any given price when the price of heating oil rises, shifting the supply curve for gasoline to the left. But it will supply more gasoline at any given price when the price of heating oil falls, shifting the supply curve for gasoline to the right. This means that gasoline and other co-produced oil products are substitutes in production for refiners. In contrast, due to the nature of the production process, other goods can be complements in production. For example, producers of crude oil – oil-well drillers – often find that oil wells also produce natural gas as a by-product of oil extraction. The higher the price at which a driller can

sell its natural gas, the more oil wells it will drill and the more oil it will supply at any given price for oil. As a result, natural gas is a complement in production for crude oil.

When a producer sells several products, the quantity of any one good it is willing to supply at any given price depends on the prices of its other co-produced goods

1) If two goods are substitutes in production, then a rise in the price of product A will result in a decrease in supply at any given price for product B

(a) If the price goes up for doughnuts, then the supply of muffins will go down

2) If two goods are complements in production, then a rise in the price of product A will result in an increase in the supply of product B

(a) If the price of cookies goes up, then there will be an increase in the supply of milk.

3. Changes in technology

When economists talk about “**technology**”, they don’t necessarily mean high technology – they mean all the methods people can use to turn inputs into useful goods and services.

Improvements in technology enable producers to spend less on inputs yet still produce the same output. When a better technology becomes available, reducing the cost of production, supply increases, and the supply curve shifts to the right. As we have already mentioned, improved technology enabled farmers to more than quadruple cotton output per acre planted over the past several decades. Improved technology is the main reason that, until recently, cotton remained relatively cheap even as worldwide demand grew.

“Technology” refers to all the methods people can use to turn inputs into useful goods and services

1) Better technology makes production easier, thus producers are willing to supply more goods at any given price, leading to shift to the right of the supply curve

4. Changes in expectations

Just as changes in expectations can shift the demand curve, they

can also shift the supply curve. When suppliers have some choice about when they put their good up for sale, changes in the expected future price of the good can lead a supplier to supply less or more of the good today.

For example, consider the fact that gasoline and other oil products are often stored for significant periods of time at oil refineries before being sold to consumers. In fact, storage is normally part of producers' business strategy. Knowing that the demand for gasoline peaks in the summer, oil refiners normally store some of their gasoline produced during the spring for summer sale. Similarly, knowing that the demand for heating oil peaks in the winter, they normally store some of their heating oil produced during the fall for winter sale. In each case, there's a decision to be made between selling the product now versus storing it for later sale. Which choice a producer makes depends on a comparison of the current price versus the expected future price. This example illustrates how changes in expectations can alter supply: An increase in the anticipated future price of a good or service reduces supply today, a leftward shift of the supply curve. But a fall in the anticipated future price increases supply today, a rightward shift of the supply curve.

5. Changes in the number of producers

Just as changes in the number of consumers affect the demand curve, changes in the number of producers affect the supply curve. Increase in the numbers of producers leads to an increase in supply and a rightward shift of the supply curve.

QUICK REVIEW

1. The supply schedule shows how the quantity supplied depends on the price. The supply curve illustrates this relationship.

2. Supply curves are normally upward sloping: at a higher price, producers are willing to supply more of a good or service.

3. A change in price results in a movement along the supply curve and a change in the quantity supplied.

4. Increases or decreases in supply lead to shifts of the supply curve. An increase in supply is a rightward shift: the quantity supplied rises for any given price. A decrease in supply is a leftward shift: the

quantity supplied falls for any given price.

5. The five main factors that can shift the supply curve are changes in (1) input prices, (2) prices of related goods or services, (3) technology, (4) expectations, and (5) number of producers.

6. The market supply curve is the horizontal sum of the individual supply curves of all producers in the market.

COMPETITION

- 1) What Is Competition in Economics?
- 2) Perfect Competition.
- 3) Imperfect Competition.
- 4) Monopoly.
- 5) Oligopoly.
- 6) Monopolistic Competition.

1) WHAT IS COMPETITION IN ECONOMICS?

In economics, competition is a condition where different economic firms seek to obtain a share of a limited good by varying the elements of **the marketing mix**: price, product, promotion and place. In classical economic thought, competition causes commercial firms to develop new products, services and technologies, which would give consumers greater selection and better products. The greater selection typically causes lower prices for the products, compared to what the price would be if there was no competition (monopoly) or little competition (oligopoly).

Three levels of economic competition have been classified:

1. The most narrow form is direct competition (also called category competition or brand competition), where products that perform the same function compete against each other.

2. The next form is **substitute competition**, where products that are close substitutes for one another compete. For example, butter competes with margarine, mayonnaise, and other various sauces and spreads.

3. The broadest form of competition is typically called budget competition. Included in this category is anything that the consumer might want to spend their available money (the so-called **discretionary income**) on. For example, a family that has \$10,000 available may choose to spend it on many different items, which can all be seen as competing with each other for the family's available money.

Competition is directly influenced by the means through which companies produce and distribute their products. Different industries

have different market structures – that is, different market characteristics that determine the relations of sellers to one another, of sellers to buyers, and so forth. **Aspects of market structure** that underlie the competitive landscape are:

- 1) the degree of concentration of sellers in an industry,
- 2) the degree of product differentiation,
- 3) the ease or difficulty with which new sellers can enter the industry.

There are several different **types of competition** in economics, which are largely defined by how many sellers there are in a market. For example, in a **monopoly**, there is just one business controlling the market with no competition at all. This one business is able to set higher prices and earn better profits. However, the more businesses that enter a market, the more competition there is. Competition lowers prices as businesses **compete for** customers and market share. It's important for business owners and consumers to understand competition in economics and how it affects different markets.

So, What Is Competition in Economics?

Competition in economics happens when a market has **a sufficient number** of buyers and sellers so that prices remain low. When there are a large number of sellers, consumers have **many options**, which means companies have to compete to offer the best prices, value and service. Otherwise, consumers will go to the competition. When consumers enjoy many choices, businesses must **remain on their toes** and continue to offer the best prices. In this way, competition self-regulates the supply and demand of markets, keeping goods affordable for consumers.

Under a truly competitive market, no one company is able **to exploit** prices because consumers always have a choice to go somewhere else. There must be a healthy amount of competition in a market for this to work. Certain markets may not have as much competition, thus driving up prices.

2) PERFECT COMPETITION

Perfect competition happens when there are many sellers of nearly

identical products. Because of so many companies selling similar products, there are many substitutes available for consumers. Prices are controlled by supply and demand, and are generally low for consumers. One example of this is apple farming. If there are several apple farms in a geographic region, they will have to price their products competitively. When one farm prices their apples too high, consumers will go to another farm. There are abundant options, meaning substitutes are easy to come by. The lower priced apple farm will sell the most product, and other farms must keep up by lowering their prices, too. This may require farms to lower operating costs or be run out of business.

Of course, it's important to note that things don't usually work this way in the real world. Perfect competition is purely theoretical. Through marketing, brands are able to differentiate their products, thus convincing consumers to pay higher prices. For example, one farm might choose to place a premium on a special type of apple. Perhaps they have the best product in the region or they create an exceptional and unique hybrid apple. Some consumers will be drawn to what they perceive as a higher quality product and pay extra for it. This is especially true with gourmet or artisanal food products.

Perfect competition is a situation in which numerous small firms producing identical products compete against each other in a given industry. Perfect competition leads to firms producing the socially optimal output level at the minimum possible cost per unit. Firms in perfect competition are "price takers" (they do not have enough market power to profitably increase the price of their goods or services). A good example would be that of digital marketplaces, such as eBay, on which many different sellers sell similar products to many different buyers.

Perfect competition forces commercial companies to expand their product line and offer consumers a greater selection of first-rate products.

All perfectly competitive industries have many producers with small market shares, producing a standardized product. Most perfectly competitive industries are also characterized by one more feature: it is easy for new firms to enter the industry or for firms that are currently in

the industry to leave. That is, no obstacles in the form of government regulations or limited access to key resources prevent new producers from entering the market. And no additional costs are associated with shutting down a company and leaving the industry. Economists refer to the arrival of new firms into an industry as entry; they refer to the departure of firms from an industry as exit. When there are no obstacles to entry into or exit from an industry, we say that the industry has free entry and exit.

The Necessary Conditions for Perfect Competition

Perfect competition **assumes**:

- the existence of many companies that sell a homogenous product
- the existence of many buyers
- the existence of informed consumers and suppliers
- no barriers to entry / exit
- no price intervention
- no government intervention
- free movement of factors of production
- companies seeking for profit maximization

Although competition ensures the best allocation of resources in view of the income distribution, it does not ensure that the goods are produced and distributed in accordance with the needs of society, due to large income disparities.

The Necessary Conditions for Perfect Competition

The markets for major grains, like wheat and corn, are perfectly competitive: individual wheat and corn farmers, as well as individual buyers of wheat and corn, take market prices as given. In contrast, the markets for some of the food items made from these grains – in particular, breakfast cereals – are by no means perfectly competitive. There is intense competition among cereal brands, but not *perfect* competition. To understand the difference between the market for wheat and the market for shredded wheat cereal is to understand the importance of the two necessary conditions for perfect competition.

First, for an industry to be perfectly competitive, it must contain

*many producers, none of whom have a large **market share**. A producer's market share is the fraction of the total industry output accounted for by that producer's output. The distribution of market share constitutes a major difference between the grain industry and the breakfast cereal industry. There are thousands of wheat farmers, none of whom account for more than a tiny fraction of total wheat sales.*

The breakfast cereal industry, however, is dominated by four producers: Kellogg's, General Mills, Post Foods, and the Quaker Oats Company. Kellogg's alone accounts for about one-third of all cereal sales. Kellogg's executives know that if they try to sell more cornflakes, they are likely to drive down the market price of cornflakes. That is, they know that their actions influence market prices, simply because they are so large a part of the market that changes in their production will significantly affect the overall quantity supplied. It makes sense to assume that producers are price-takers only when an industry does *not* contain any large producers like Kellogg's.

Second, an industry can be perfectly competitive only if consumers regard the products of all producers as equivalent. This clearly isn't true in the break- fast cereal market: consumers don't consider Cap'n Crunch to be a good substitute for Wheaties. As a result, the maker of Wheaties has some ability to increase its price without fear that it will lose all its customers to the maker of Cap'n Crunch.

Contrast this with the case of a **standardized product**, which is a product that consumers regard as the same good even when it comes from different producers, sometimes known as a **commodity**. Because wheat is a standardized product, consumers regard the output of one wheat producer as a perfect substitute for that of another producer. Consequently, one farmer cannot increase the price for his or her wheat without losing all sales to other wheat farmers. *So, the second necessary condition for a competitive industry is that the industry output is a standardized product.*

3) IMPERFECT COMPETITION

In economic theory, imperfect competition is a type of market

structure showing some but not all features of competitive markets.

Forms of imperfect competition include:

Monopoly: A firm with no competitors in its industry. A monopoly firm produces less output, has higher costs, and sells its output for a higher price than it would if constrained by competition. These negative outcomes usually generate government regulation.

Oligopoly: An industry with only a few firms. If they collude, they form a cartel to reduce output and drive up profits the way a monopoly does.

Monopolistic competition: A situation in which many firms with slightly different products compete. Production costs are above what may be achieved by perfectly competitive firms, but society benefits from the product differentiation.

Duopoly: A special form of Oligopoly, with only two firms in an industry.

Monopsony: A market with a single buyer and many sellers.

Oligopsony: A market with a few buyers and many sellers.

4) MONOPOLY

A **monopoly** is a market structure in which a market or industry is dominated by a single supplier of a particular good or service. Because monopolies have no competition they tend to sell goods and services at a higher price and produce below the socially optimal output level. Although not all monopolies are a bad thing, especially in industries where multiple firms would result in more problems than benefits (i.e. natural monopolies).

Today the term monopoly is usually extended to include any group of firms, which act together to fix prices or levels of production. Complete control of all output is not necessary to exercise monopoly power. Any combination of firms, which controls at least 80% of an industry's production, can dictate the prices of the remaining 20%.

Aside from private monopolies, there are public monopolies. One example of a public monopoly in the United States is the nonprofit postal service. There is also the «natural» monopoly, which exists when it is

more efficient, technically, to have a single seller.

Although the precise definition of monopoly – a market structure with only a single seller of a commodity or service – cannot be applied directly to a labor union because a union is not a seller of services, labor unions have monopolistic characteristics. For example, when a union concludes a wage settlement, which sets wage rates at a level higher than that acceptable to unorganized workers, the union clearly contributes to monopolistic wage results. In effect, the price of labor (wages) is set without regard to the available supply of labor.

It's good to be a monopolist, but it's not so good to be a monopolist's customer. A monopolist, by reducing output and raising prices, benefits at the expense of consumers. But buyers and sellers always have conflicting interests. Is the conflict of interest under monopoly any different than it is under perfect competition? The answer is yes, because monopoly is a source of inefficiency: the losses to consumers from monopoly behavior are larger than the gains to the monopolist. Because monopoly leads to net losses for the economy, governments often try either to prevent the emergence of monopolies or to limit their effects. So monopoly hurts the welfare of society as a whole and is a source of market failure. Is there anything government policy can do about it?

Policy toward monopoly depends crucially on whether or not the industry in question is **a natural monopoly**, one in which increasing returns to scale ensure that a bigger producer has lower average total cost. If the industry is not a natural monopoly, the best policy is to prevent monopoly from arising or break it up if it already exists.

Breaking up a monopoly that isn't natural is clearly a good idea: the gains to consumers outweigh the loss to the producer. But it's not so clear whether a natural monopoly, one in which a large producer has lower average total costs than small producers, should be broken up, because this would raise average total cost. For example, a town government that tried to prevent a single company from dominating local gas supply – which is almost surely a natural monopoly – would raise the cost of providing gas to its residents.

Yet even in the case of a natural monopoly, a profit-maximizing monopolist acts in a way that causes inefficiency – it charges consumers a price that is higher than marginal cost and, by doing so, prevents some potentially beneficial transactions. Also, it can seem unfair that a firm that has managed to establish a monopoly position earns a large profit at the expense of consumers.

What can public policy do about this? There are two common answers.

1. Public Ownership

In many countries, the preferred answer to the problem of natural monopoly has been public ownership. Instead of allowing a private monopolist to control an industry, the government establishes a public agency to provide the good and protect consumers' interests. In Britain, for example, telephone service was provided by the state-owned British Telecom before 1984, and airline travel was provided by the state-owned British Airways before 1987. (These companies still exist, but they have been privatized, competing with other firms in their respective industries.)

2. Regulation

In the United States, the more common answer has been to leave the industry in private hands but subject it to regulation. In particular, most local utilities like electricity, land line telephone service, natural gas, and so on are covered by price regulation that limits the prices they can charge.

Must Monopoly Be Controlled?

Some economists have argued that the best solution, even in the case of natural monopoly, may be to live with it. The case for doing nothing is that attempts to control monopoly will, one way or another, do more harm than good – for example, by the politicization of pricing, which leads to shortages, or by the creation of opportunities for political corruption.

MONOPOLIES VERSUS COMPETITION

Pure monopoly is a theoretical market structure where there is only one seller of a commodity or service, where entry into the industry is

closed to potential competitors, and where the seller has complete control over the quantity of goods offered for sale and the price at which goods are sold. Pure monopoly is one of two limiting cases used in the analysis of market structure. The other is pure competition, a situation in which there are many sellers who can influence neither the total quantity of a commodity or service offered for sale nor its selling price. Hence, monopoly is the exact antithesis of competition. It is generally agreed that neither of these two limiting cases is to be found among existing market structures.

The monopolist establishes market position by ability to control absolutely the supply of a product or service offered for sale and the related ability to set price. Theoretically, profit maximization is the primary objective, and it is often possible to achieve this by restricting output and the quantity of goods offered for sale. Levels of output are held below the quantity that would be produced in a competitive situation. Hence, monopoly is of interest to economic policymakers because it may impede the most efficient possible allocation of a nation's economic resources.

Monopolies held by individuals or organizations may begin by the granting of a patent or a copyright, by the possession of a superior skill or talent, or by the ownership of strategic capital. The huge capital investment necessary to organize a firm in some industries raises an almost insurmountable barrier to entry in these monopolistic fields and, thus, provides established corporations in these industries with potential monopoly power.

5) OLIGOPOLY

Oligopoly, a type of market structure in which there are only a few producers. Oligopoly is a very important reality – much more important, in fact, than monopoly and arguably more typical of modern economies than perfect competition.

An oligopoly is a market structure in which a market or industry is dominated by a small number of firms (oligopolists).

Oligopolists obviously compete with one another for sales.

Economists refer to a situation in which firms compete but also possess market power – which enables them to affect market prices – as imperfect competition.

It's important to realize that an oligopoly isn't necessarily made up of large firms. What matters isn't size per se; the question is how many competitors there are.

Why are oligopolies so prevalent? Essentially, oligopoly is the result of the same factors that sometimes produce monopoly, but in somewhat weaker form. Probably the most important source of oligopoly is the existence of *increasing returns to scale*, which give bigger producers a cost advantage over smaller ones. When these effects are very strong, they lead to monopoly; when they are not that strong, they lead to an industry with a small number of firms. For example, larger grocery stores typically have lower costs than smaller ones. But the advantages of large scale taper off once grocery stores are reasonably large, which is why two or three stores often survive in small towns.

6) MONOPOLISTIC COMPETITION

Leo manages the Wonderful Wok stand in the food court of a big shopping mall. He offers the only Chinese food there, but there are more than a dozen alternatives, from Bodacious Burgers to Pizza Paradise. When deciding what to charge for a meal, Leo knows that he must take those alternatives into account: even people who normally prefer stir-fry won't order a \$15 lunch from Leo when they can get a burger, fries, and drink for \$4.

But Leo also knows that he won't lose all his business even if his lunches cost a bit more than the alternatives. Chinese food isn't the same thing as burgers or pizza. Some people will really be in the mood for Chinese that day, and they will buy from Leo even if they could dine more cheaply on burgers. Of course, the reverse is also true: even if Chinese is a bit cheaper, some people will choose burgers instead. In other words, Leo does have some market power: he has *some* ability to set his own price.

So how would you describe Leo's situation? He definitely isn't a price-taker, so he isn't in a situation of perfect competition. But you wouldn't exactly call him a monopolist, either. Although he's the only seller of Chinese food in that food court, he does face competition from other food vendors.

Yet it would also be wrong to call him an oligopolist. Oligopoly, remember, involves competition among a small number of interdependent firms in an industry protected by some – albeit limited – barriers to entry and whose profits are highly interdependent. Because their profits are highly interdependent, oligopolists have an incentive to collude, tacitly or explicitly. But in Leo's case there are *lots* of vendors in the shopping mall, too many to make tacit collusion feasible.

Economists describe Leo's situation as one of **monopolistic competition**.

Monopolistic competition is particularly common in service industries like restaurants and gas stations, but it also exists in some manufacturing industries. It involves **three conditions**: large numbers of competing producers, differentiated products, and free entry into and exit from the industry in the long run. In a monopolistically competitive industry, each producer has some ability to set the price of her differentiated product. But exactly how high she can set it is limited by the competition she faces from other existing and potential producers that produce close, but not identical, products.

In a monopolistically competitive industry, there are many producers. Such an industry does not look either like a monopoly, where the firm faces no competition, or an oligopoly, where each firm has only a few rivals. Instead, each seller has many competitors. For example, there are many vendors in a big food court, many gas stations along a major highway, and many hotels at a popular beach resort.

In a monopolistically competitive industry, each producer has a product that consumers view as somewhat distinct from the products of competing firms; at the same time, though, consumers see these competing products as close substitutes.

In monopolistically competitive industries, new producers, with

their own distinct products, can enter the industry freely in the long run. For example, other food vendors would open outlets in the food court if they thought it would be profitable to do so. In addition, firms will exit the industry if they find they are not covering their costs in the long run.

Monopolistic competition, then, differs from the three market structures. It's not the same as *perfect competition*: firms have some power to set prices. It's not pure *monopoly*: firms face some competition. And it's not the same as *oligopoly*: because there are many firms and free entry, the potential for collusion so important in oligopoly no longer exists.

How do firms in the same industry – such as fast-food vendors, gas stations, or chocolate makers – differentiate their products? Sometimes the difference is mainly in the minds of consumers rather than in the products themselves. **Product differentiation** often plays an important role in *oligopolistic industries*. In such industries, product differentiation reduces the intensity of competition between firms. Product differentiation plays an even more crucial role in *monopolistically competitive industries*. Because tacit collusion is virtually impossible when there are many producers, product differentiation is the only way monopolistically competitive firms can acquire some market power.

The key to product differentiation is that consumers have different preferences and are willing to pay somewhat more to satisfy those preferences. Each producer can carve out a market niche by producing something that caters to the particular preferences of some group of consumers better than the products of other firms.

There are **three important forms of product differentiation**: differentiation by style or type, differentiation by location, and differentiation by quality.

QUICK REVIEW

1) In monopolistic competition there are many competing producers, each with a differentiated product, and free entry and exit in the long run.

2) Product differentiation can occur in oligopolies that fail to achieve tacit collusion as well as in monopolistic competition. It takes

three main forms: by style or type, by location, or by quality. The products of competing sellers are considered imperfect substitutes.

3) Producers compete for the same market, so entry by more producers reduces the quantity each existing producer sells at any given price. In addition, consumers gain from the increased diversity of products.

UNEMPLOYMENT AND INFLATION

- 1) Employment and unemployment
- 2) Inflation and deflation.

1) EMPLOYMENT AND UNEMPLOYMENT

Employment is the number of people currently employed in the economy, either full time or part time.

Unemployment is the number of people who are actively looking for work but aren't currently employed.

Employment is considered to be a key concept in economics and its significance is reflected in the perception that people at work are seen as individuals/ groups of individuals involved in the production of services and goods. Such production requires human capital and time; thus, organizations of different types pay people that are involved in the production process providing them with income that is later used to boost economic activity. In macroeconomics, low rates of national employment may signal underdevelopment or long-lasting depression while high rates of national employment may signal economic growth and development.

Employment is the total number of people currently employed, either full time or part time

Employment is a relationship between two parties, usually based on a contract where work is paid for, where one party, which may be a corporation, for profit, not-for-profit organization, co-operative or other entity is the employer and the other is the employee. Employees work in return for payment, which may be in the form of an hourly wage, by piecework or an annual salary, depending on the type of work an employee does or which sector she or he is working in. Employees in some fields or sectors may receive gratuities, bonus payment or stock options. In some types of employment, employees may receive benefits in addition to payment. Benefits can include health insurance, housing, disability insurance. Employment is typically governed by employment laws, regulations or legal contracts.

A major macroeconomic indicator is the **unemployment rate**.

Unemployment is the number of people who are actively looking for work but aren't currently employed.

Just because a person isn't working doesn't mean that we consider that person unemployed. For example, there are retired workers in receiving social security checks. Most of them are probably happy that they are no longer working, so we wouldn't consider someone who has settled into a comfortable, well-earned retirement to be unemployed. There are also disabled workers receiving benefits because they are unable to work. Again, although they aren't working, we wouldn't normally consider them to be unemployed.

So, the unemployed are those who are "jobless, looking for jobs, and available for work". Retired people don't count because they aren't looking for jobs; the disabled don't count because they aren't available for work. More specifically, an individual is considered unemployed if he or she doesn't currently have a job and has been actively seeking a job during the past four weeks. So **unemployment** is defined as the total number of people who are actively looking for work but aren't currently employed.

Unemployment can be generally broken down into several types that are related to different causes.

- Classical unemployment theory suggests that unemployment occurs when wages are too high for employers to be willing to hire more workers. Other more modern economic theories suggest that increased wages actually decrease unemployment by creating more consumer demand. According to these more recent theories, unemployment results from reduced demand for the goods and services produced through labor and suggest that only in markets where profit margins are very low, and in which the market will not bear a price increase of product or service, will higher wages result in unemployment.

- Economists say that workers who spend time looking for employment are engaged in **job search**. If all workers and all jobs were alike, job search wouldn't be necessary; if information about jobs and workers was perfect, job search would be very quick. In practice, however, it's normal for a worker who loses a job, or a young worker

seeking a first job, to spend at least a few weeks searching.

There are three main types of unemployment: *frictional*, *structural* and *cyclical*. The first two make up the natural unemployment rate. The third rises when demand falls, usually during a recession.

A *recession* is when the economy experiences a marked slippage in economic activity.

1) Frictional unemployment occurs when workers leave their old jobs but haven't yet found new ones. Most of the time workers leave voluntarily, either because they need to move, or they've saved up enough money to allow them to look for a better job.

Frictional unemployment also occurs when students are looking for that first job or when mothers are returning to the workforce. It also happens when workers are fired or, in some cases, laid off due to business-specific reasons, such as a plant closure.

Frictional unemployment is short-term and a natural part of the job search process. In fact, frictional unemployment is good for the economy, as it allows workers to move to jobs where they can be more productive.

2) Structural unemployment exists when shifts occur in the economy that creates a mismatch between the skills workers have and the skills needed by employers. An example of this is an industry's replacement of machinery workers with robots. Workers now need to learn how to manage the robots that replaced them. Those that don't learn need retraining for other jobs or face long-term structural unemployment.

A long recession often creates structural unemployment. If workers stay unemployed for too long, their skills have likely become outdated. Unless they are willing and able to take a lower-level, unskilled job, they may stay unemployed even when the economy recovers. If this happens, structural unemployment leads to a higher rate of natural unemployment.

Structural unemployment is similar to frictional unemployment as both reflect the problem of matching workers with job vacancies, but structural unemployment also covers the time needed to acquire new skills in addition to the short term search process.

Because some frictional unemployment is inevitable and because many economies also suffer from structural unemployment, a certain amount of unemployment is normal, or “natural.” Actual unemployment fluctuates around this normal level. The **natural rate of unemployment** is the normal unemployment rate around which the actual unemployment rate fluctuates. It is the rate of unemployment that arises from the effects of frictional plus structural unemployment.

Cyclical unemployment is the deviation of the actual rate of unemployment from the natural rate; that is, it is the difference between the actual and natural rates of unemployment. As the name suggests, cyclical unemployment is the share of unemployment that arises from the downturns of the business cycle. That's when demand for goods and services fall dramatically, forcing businesses to lay off large numbers of workers to cut costs. Cyclical unemployment tends to create more unemployment. This is because the laid-off workers have less money to buy the goods and services they need, further lowering demand.

Government intervention, in the form of expansive monetary policy and even fiscal policy, is required to stop the downward **spiral**. After the stock market crash of 1929, the government did not step in right away. This led to the Great Depression, which lasted 10 years and led to a 25% unemployment rate.

Some economists define as many as six additional types of unemployment, such as *seasonal* and *classical*.

Some sources include **seasonal unemployment** as another type of unemployment. It is part of natural unemployment. Like its name suggests, seasonal unemployment results from regular changes in the season. Workers affected by seasonal unemployment include resort workers, ski instructors, and ice cream vendors. It could also include people who harvest crops. School employees and construction workers can also be considered seasonal workers.

Classical unemployment is also known as “real wage unemployment” or “induced unemployment”. It's when wages are higher than the laws of supply and demand would normally dictate. It occurs in one of these three situations:

1) Unions negotiate higher salaries and benefits.

2) Long-term contracts set a wage that has become too high due to a recession.

3) The government sets a minimum wage that's too high.

The result is that companies must pay more per employee, so they can afford fewer employees. Those that are laid off are victims of classical unemployment.

A country's **labor force** is the sum of employment and unemployment – that is, of people who are currently working and people who are currently looking for work, respectively. The **labor force participation rate**, defined as the share of the working-age population that is in the labor force, is calculated as follows:

$$\text{Labor force participation rate} = \text{Labor force} / \text{Population age 16 and older} \times 100\%$$

The **unemployment rate**, defined as the percentage of the total number of people in the labor force who are unemployed, is calculated as follows:

$$\text{Unemployment rate} = \text{Number of unemployed workers} / \text{Labor force} \times 100\%$$

In general, the unemployment rate is a good indicator of how easy or difficult it is to find a job given the current state of the economy. When the unemployment rate is low, nearly everyone who wants a job can find one.

Although the unemployment rate is a good indicator of current labor market conditions, it's not a literal measure of the percentage of people who want a job but can't find one. That's because in some ways the unemployment rate exaggerates the difficulty people have in finding jobs. But in other ways, the opposite is true – a low unemployment rate can conceal deep frustration over the lack of job opportunities.

2) INFLATION AND DEFLATION

Inflation is generally defined as a persistent rise in the general price level with no corresponding rise in output, which leads to a corresponding fall in the purchasing power of money.

We shall look briefly at the problems that inflation causes for business and consider whether there are any potential benefits for an enterprise from an inflationary period.

Inflation *varies* considerably in its extent and severity. Hence, the consequences for the business community differ according to circumstances. Mild inflation of a few per cent each year may pose few difficulties for business.

Inflation imposes a tax on individuals who hold money. And, like most taxes, it will lead people to change their behavior. In particular, when inflation is high, people will try to avoid holding money and will instead substitute real goods as well as interest-bearing assets for money. Moreover, people don't just reduce their nominal money holdings – they reduce their real money holdings, cutting the amount of money they hold so much that it actually has less purchasing power than the amount of money they would hold if inflation were low. They do this by using the money to buy goods that last over time or assets that hold their value like gold. Why? Because the more real money holdings they have, the greater the real amount of resources the government captures from them through the inflation tax.

How countries can get themselves into situations of extreme inflation? High inflation arises when the government must print a large quantity of money, imposing a large inflation tax, to cover a large budget deficit.

Hyperinflation, which entails enormously high rates of inflation, can create almost insurmountable problems for the government, business, consumers and workers.

Businesses would have experienced great difficulty in costing and pricing their production while the incentive for people to save would have been removed.

Economists argue at length about the causes of, and «cures» for, inflation. They would, however, recognize that two general types of inflation exist:

- *Demand-pull inflation*
- *Cost-push inflation*

Demand-pull Inflation

Demand-pull inflation occurs when demand for a nation's goods and services outstrips that nation's ability to supply these goods and services. This causes prices to rise generally as a means of limiting demand to the available supply.

An alternative way that we can look at this type of inflation is to say that it occurs when injections exceed withdrawals and the economy is already stretched (i.e. little available labor or factory space) and there is little scope to increase further its level of activity.

Cost-push Inflation

Alternatively, inflation can be of the cost-push variety. This takes place when firms face increasing costs. This could be caused by an increase in wages, the rising costs of imported raw materials and components or companies pushing up prices in order to improve their profit margins.

INFLATION AND BUSINESS

Inflation can adversely affect business in a number of ways):

1. Accounting and financial problems.

Significant rates of inflation can cause accounting and financial problems for businesses. They may experience difficulty in valuing assets and stocks, for example. Such problems can waste valuable management time and make forecasting, comparisons and financial control more onerous.

2. Falling sales.

Many businesses may experience falling sales during inflationary periods for two broad reasons. Firstly, it may be that saving rises in a time of inflation. We would expect people to spend more of their money when prices are rising to avoid holding an asset (cash), which is falling in value. However, during the mid-1970s, when industrialized nations were experiencing high inflation rates, savings as a proportion of income rose! It is not easy to identify the reason for this, but some economists suggest that people like to hold a relatively high proportion of their assets in a form which can be quickly converted into cash when the future is uncertain.

Whatever the reason, if people save more they spend less and businesses suffer falling sales. The economic model predicts that if savings rose the level of activity in the economy would fall. Clearly, if this happened we would expect businesses to experience difficulty in maintaining their levels of sales.

Businesses may be hit by a reduction in sales during a time of inflation for a second reason. As inflation progresses, it is likely that workers' money wages (that is, wages unadjusted for inflation,) will be increased broadly in line with inflation. This may well take a worker into a higher tax bracket and result in a higher percentage of his or her wages being taken as tax. This process, known as fiscal drag, will cause workers to have less money available to spend on firms' goods and services. The poverty trap has a similar impact. As money wages rise, the poor may find that they no longer qualify for state benefits to supplement their incomes and at the same time they begin to pay income tax on their earnings. Again, this leaves less disposable income to spend on the output of firms. Finally, it may be that the wages of many groups are not index-linked and so they rise less quickly than the rate of inflation, causing a reduction in spending power and demand for goods and services.

Once again, the economic model can be used to predict that increases in the level of taxation will increase withdrawals, lowering the level of economic activity and depressing firms' sales.

Not all businesses will suffer equally from declining demand in an inflationary period. Those selling essential items, such as food, may be little affected whilst others supplying less essential goods and services, such as foreign holidays, may be hard hit.

3. High interest rates.

Inflation is often accompanied by high interest rates.

High interest rates tend to discourage investment by businesses as they increase the cost of borrowing funds. Thus, investment may fall. Businesses may also be dissuaded from undertaking investment programs because of a lack of confidence in the future stability and prosperity of the economy. This fall in investment may be worsened by foreign

investment being reduced as they also lose some confidence in the economy's future.

Such a decline in the level of investment can lead to businesses having to retain obsolete, inefficient and expensive means of production and cause a loss of international competitiveness. Finally, a fall in investment can lower the level of economic activity, causing lower sales, output and so on. Thus, to some extent, businesses can influence the economic environment in which they operate.

4. Higher costs.

During a bout of inflation firms will face higher costs for the resources they need to carry on their business. They will have to pay higher wages to their employees to compensate them for rising prices. Supplies of raw materials and fuel will become more expensive as will rents and rates. The inevitable reaction to this is that the firm has to raise its own prices. This will lead to further demands for higher wages as is called the wage- price spiral. Such cost-push inflation may make the goods and services produced by that enterprise internationally less competitive in terms of price. An economy whose relative or comparative rate of inflation is high may find that it is unable to compete in home or foreign markets because its products are expensive. The economic model tells us that a situation of declining exports and increasing imports will lower the level of activity in the economy with all the consequent side-effects.

Deflation

Before World War II, deflation – a falling aggregate price level – was almost as common as inflation. In fact, the U.S. consumer price index on the eve of World War II was 30% lower than it had been in 1920. After World War II inflation became the norm in all countries. But in the 1990s, deflation reappeared in Japan and proved difficult to reverse. Concerns about potential deflation played a crucial role in U.S. monetary policy in the early 2000s and again in the aftermath of the 2008 financial crisis.

Why is deflation a problem? And why is it hard to end?

Deflation is a decrease in the general price level of goods and

services. Deflation occurs when the inflation rate falls below 0% (a negative inflation rate). Inflation reduces the value of currency over time, but deflation increases it. This allows one to buy more goods and services than before with the same amount of currency. Deflation is distinct from disinflation, a slow-down in the inflation rate, i.e. when inflation declines to a lower rate but is still positive.

Economists generally believe that deflation is a problem in a modern economy because it increases the real value of debt, especially if the deflation is unexpected. Deflation may also aggravate recessions and lead to a deflationary spiral.

Deflation usually happens when supply is high (when excess production occurs), when demand is low (when consumption decreases), or when the money supply decreases (sometimes in response to a contraction created from careless investment or a credit crunch). It can also happen as a result of too much competition and too little market concentration.

Deflation, like inflation, produces both winners and losers – but in the opposite direction. Due to the falling price level, a dollar in the future has a higher real value than a dollar today. So lenders, who are owed money, gain under deflation because the real value of borrowers' payments increases. Borrowers lose because the real burden of their debt rises.

In a famous analysis at the beginning of the Great Depression, Irving Fisher (who first analyzed the Fisher effect of expected inflation on interest rates) claimed that the effects of deflation on borrowers and lenders can worsen an economic slump. Deflation, in effect, takes real resources away from borrowers and redistributes them to lenders. Fisher argued that borrowers, who lose from deflation, are typically short of cash and will be forced to cut their spending sharply when their debt burden rises. Lenders, however, are unlikely to increase spending sharply when the values of the loans they own rise. The overall effect, said Fisher, is that deflation reduces aggregate demand, deepening an economic slump, which, in a vicious circle, may lead to further deflation. The effect of deflation in reducing aggregate demand, known as debt deflation, probably played a significant role in the Great

Depression.

Comparison chart

Basis for comparison	Inflation	Deflation
Meaning	When the value of money decreases in the international market, then this situation is termed as inflation.	Deflation is a situation, when the value of money increases in the international market.
Effects	Increase in the general price level	Decrease in the general price level
National income	Does not declines	Declines
Gold prices	Falls	Rises
Classification	Demand pull inflation, cost push inflation, stagflation and deflation.	Debt deflation, money supply side deflation, credit deflation.
Good for	Producers	Consumers
Consequences	Unequal distribution of income.	Rise in the level of unemployment
Which is evil?	A little bit of inflation is a symbol of economic growth of the country.	Deflation is not good for an economy.

QUICK REVIEW

1. In analyzing high inflation, economists use the classical model of the price level, which says that changes in the money supply lead to proportional changes in the aggregate price level even in the short run.

2. Governments sometimes print money in order to finance budget deficits. When they do, they impose an inflation tax, generating tax revenue equal to the inflation rate times the money supply, on those who hold money. Revenue from the real inflation tax, the inflation rate times the real money supply, is the real value of resources captured by the government. In order to avoid paying the inflation tax, people reduce the irreal money holdings and force the government to increase inflation to capture the same amount of real inflation tax revenue. In some cases, this leads to a vicious circle of a shrinking real money supply and arising rate of inflation, leading to hyperinflation and a fiscal crisis.

3. Countries that don't need to print money to cover government deficits can still stumble into moderate inflation, either because of political opportunism or because of wishful thinking.

4. Deflation poses several problems. It can lead to debt deflation, in which arising real burden of outstanding debt intensifies an economic downturn.

A rising overall level of prices is inflation.

A falling overall level of prices is deflation.

The economy has price stability when the overall level of prices changes slowly or not at all.

Both inflation and deflation can pose problems for the economy. Here are two examples: inflation discourages people from holding onto cash, because cash loses value over time if the overall price level is rising. That is, the amount of goods and services you can buy with a given amount of cash falls. In extreme cases, people stop holding cash altogether and turn to barter. Deflation can cause the reverse problem. If the price level is falling, cash gains value over time. In other words, the amount of goods and services you can buy with a given amount of cash increases. So holding on to it can become more attractive than investing in new factories and other productive assets. This can deepen a recession.

MONETARY AND FISCAL POLICY

- 1) Monetary policy
- 2) Fiscal policy
- 3) Impact of fiscal and monetary policies on economy

Monetary policy and *fiscal policy* refer to the two most widely recognized tools used to influence a nation's economic activity. *Monetary policy* is primarily concerned with the management of interest rates and the total supply of money in circulation and is generally carried out by central banks. *Fiscal policy* is a collective term for the taxing and spending actions of governments.

Fiscal and monetary policies can ensure the smooth running of the economy of a country. Flexible policies that can be changed over time can make the economy strong and stable. Today, the world is going through terrible phases in terms of economic conditions, and many economies are in the downward period. In an economic crunch, only flexible monetary and fiscal policies can support the economic system as policies can easily be adjusted to fit what is best.

1) MONETARY POLICY

Monetary policy is the action of concerned authorities that establish the rate and growth of money supply, keeping in view the interest rates. Actions like modification in interest rates, buying and selling of government securities or modifying the amount of reserve.

Central banks typically have used monetary policy to either stimulate an economy or to check its growth. By incentivizing individuals and businesses to borrow and spend, the monetary policy aims to spur economic activity. Conversely, by restricting spending and incentivizing savings, monetary policy can act as a brake on inflation and other issues associated with an overheated economy.

Monetary policy can be categorized into two types i.e. expansionary and contractionary. In an *expansionary policy*, a central bank increases the money supply to avoid unemployment issues and enhance consumer spending. The *contractionary monetary policy* is the opposite

of expansionary policy and a central bank tries to slow down the money supply to curb inflation.

Central banks implement monetary policy by controlling the money supply through several mechanisms. Typically, central banks take action by issuing money to buy bonds (or other assets), which boosts the supply of money and lowers interest rates, or, in the case of contractionary monetary policy, banks sell bonds and take money out of circulation. Usually policy is not implemented by directly targeting the supply of money.

Central banks continuously shift the money supply to maintain a targeted fixed interest rate. Some of them allow the interest rate to fluctuate and focus on targeting inflation rates instead. Central banks generally try to achieve high output without letting loose monetary policy that create large amounts of inflation.

Conventional monetary policy can be ineffective in situations such as a liquidity trap. When interest rates and inflation are near zero, the central bank cannot loosen monetary policy through conventional means.

Central banks can use unconventional monetary policy such as quantitative easing to help increase output. Instead of buying government bonds, central banks can implement quantitative easing by buying not only government bonds, but also other assets such as corporate bonds, stocks, and other securities. This allows lower interest rates for a broader class of assets beyond government bonds.

2) FISCAL POLICY

Fiscal policy can be distinguished from monetary policy, in that fiscal policy deals with taxation and government spending and is often administered by a government department; while monetary policy deals with the money supply, interest rates and is often administered by a country's central bank. Both fiscal and monetary policies influence a country's economic performance.

If the revenue exceeds expenditure, then this situation is known as fiscal surplus, whereas if the expenditure is greater than the revenue, it is

known as the fiscal deficit. The main objective of the fiscal policy is to bring stability, reduce unemployment and growth of the economy. The instruments used in the Fiscal Policy are the level of taxation and its composition and expenditure on various projects. There are two types of fiscal policy, they are:

Expansionary Fiscal Policy: The policy in which the government minimizes taxes and increase public spending.

Contractionary Fiscal Policy: The policy in which the government increases taxes and reduce public expenditure.

When the government of a country employs its tax revenue and expenditure policies to influence the overall demand and supply for commodities and services in the nation's economy is known as Fiscal Policy. It is a strategy used by the government to maintain the equilibrium between government receipts through various sources and spending over different projects. The fiscal policy of a country is announced by the finance minister through budget every year.

A **tax** is a mandatory financial charge or some other type of levy imposed upon a taxpayer (an individual or other legal entity) by a governmental organization in order to fund various public expenditures. A failure to pay, along with evasion of or resistance to taxation, is punishable by law. Taxes consist of direct or indirect taxes and may be paid in money or as its labor equivalent.

Most countries have a tax system in place to pay for public/common/agreed national needs and government functions: some levy a flat percentage rate of taxation on personal annual income, some on a scale based on annual income amounts, and some countries impose almost no taxation at all, or a very low tax rate for a certain area of taxation. Some countries charge a tax both on corporate income and dividends; this is often referred to as double taxation as the individual shareholder(s) receiving this payment from the company will also be levied some tax on that personal income.

Many jurisdictions tax the income of individuals and business entities, including corporations. Generally, the tax is imposed on net profits from business, net gains, and other income. Computation of

income subject to tax may be determined under accounting principles used in the jurisdiction, which may be modified or replaced by tax law principles in the jurisdiction. The incidence of taxation varies by system, and some systems may be viewed as progressive or regressive. Rates of tax may vary or be constant (flat) by income level. Many systems allow individuals certain personal allowances and other nonbusiness reductions to taxable income, although business deductions tend to be favored over personal deductions.

A government budget is an annual financial statement presenting the government's proposed revenues and spending for a financial year that is often passed by the legislature, approved by the chief executive or president and presented by the Finance Minister to the nation. The budget is also known as the Annual Financial Statement of the country. This document estimates the anticipated government revenues and government expenditures for the ensuing (current) financial year. For example, only certain types of revenue may be imposed and collected. Property tax is frequently the basis for municipal and county revenues, while sales tax and/or income tax are the basis for state revenues, and income tax and corporate tax are the basis for national revenues.

The two basic elements of any budget are the revenues and expenses. In the case of the government, revenues are derived primarily from taxes. Government expenses include spending on current goods and services, which economists call government consumption; government investment expenditures such as infrastructure investment or research expenditure; and transfer payments like unemployment or retirement benefits.

A budget can be of three types:

Balanced Budget: When government receipts are equal to the government expenditure, it is called a balanced budget.

Deficit Budget: When government expenditure exceeds government receipts, the budget is said to be deficit. A deficit can be of 3 types, Revenue, Fiscal and Primary deficit.

Surplus: When government receipts are more than expenditure.

The effects of fiscal policy can be limited by crowding out. When the government takes on spending projects, it limits the amount of resources available for the private sector to use. Crowding out occurs when government spending simply replaces private sector output instead of adding additional output to the economy. Crowding out also occurs when government spending raises interest rates, which limits investment. Defenders of fiscal stimulus argue that crowding out is not a concern when the economy is depressed, plenty of resources are left idle, and interest rates are low.

3) IMPACT OF FISCAL AND MONETARY POLICIES ON ECONOMY

Fiscal and monetary policies are powerful tools that the government and concerned monetary authorities use to influence the economy based on reaction to certain issues and prediction of where the economy is moving. The monetary authorities need to make accurate predictions based on solid information to properly adjust the money flow and rates of interest. There is an inverse relationship in money flow and interest rates. Increasing money flow and decreasing interest rates can encourage spending and, as a result, stimulates the economy. More spending means more jobs and curbing unemployment.

For creating balance in the economy, normally a central bank uses various techniques of contraction and expansion. These techniques are helpful if based on accurate data and records.

A central bank buys and sells government securities to bring accurate momentum and money flow. Sometimes a central bank sets a required reserve ratio which bound other commercial banks to keep a certain amount of cash with them at all times. One of the techniques is to offer a discount or lower the interest rate to encourage borrowing, and as a result, involve more people in borrowing and spending. These are some of the quantitative techniques that central banks exercise to regulate economy properly. Apart from that, a central bank can exercise certain qualitative techniques like Regulation of consumer credit, Direct Action and Rationing of the credit to ensure the smooth running of the

economy. It is a continuous process and changes with the requirements of the economy.

The fiscal and monetary policies have an impact on individual's life too. If a government thinks the economy is overheating and growing very fast, there are chances of inflation so, the government may decrease spending. Decline in government spending means lowering the overall demand in the economy and, as a result, there will be lower production. Low production means lower hiring and investments. So, a cut in government spending will hurt general people as they will have less money in pockets to invest in their stores or shops and there will be a general decline in the economy.

Similarly, taxes play a vital role in fiscal and monetary policy. Decreasing in taxes can stimulate the economy as people will have more money in pockets to either invest or save. The investments will increase production and more people will be hired reducing the level of unemployment.

On the other hand if the extra amount is put into banks, the banks will further loan it and the borrowers will spend. Here, it is important to note that all of these techniques are effective only if the government has enough money to support the economy when it needs money. If the government is not able or doesn't have enough revenue to support spending, these techniques will have a crowding out effects. It is because the government will borrow in case of lower revenue resources. Government borrowing can give boost to interest rates. Increasing of interest rates can discourage individual and businesses, from borrowing money from banks. Tight borrowing can affect investments negatively. So, the implementation of fiscal and monetary policies depends upon government's financial strengths.

Inflation is one of the major issues that influence fiscal and monetary policies all over the world. When the financial authorities, for example, decide to reduce the main funds rate, the resulting stronger demands for goods and services will give birth to higher wages and other costs. The higher costs reflect higher demands for labors and materials that the primary requirements of production. The higher costs

not only influence current inflation but also influence economic performance and expectations about prices and wages. All these expectation can influence inflation in the economy.

INTERNATIONAL ASPECTS OF ECONOMIC DEVELOPMENT

- 1) World economy. International trade and foreign trade policy.
- 2) International economic relations and monetary system. Country balance of payments.

1) WORLD ECONOMY. INTERNATIONAL TRADE AND FOREIGN TRADE POLICY

The world economy or global economy is the economy of the world, considered as the international exchange of goods and services that is expressed in monetary units of account (money). In some contexts, the two terms are distinguished: the “international” or “global economy” being measured separately and distinguished from national economies while the “world economy” is simply an aggregate of the separate countries' measurements. Beyond the minimum standard concerning value in production, use and exchange the definitions, representations, models and valuations of the world economy vary widely. It is inseparable from the geography and ecology of Earth.

It is common to limit questions of the world economy exclusively to human economic activity and the world economy is typically judged in monetary terms, even in cases in which there is no efficient market to help value certain goods or services, or in cases in which a lack of independent research or government cooperation makes establishing figures difficult. Typical examples are illegal drugs and other black market goods, which by any standard are a part of the world economy, but for which there is by definition no legal market of any kind.

However, even in cases in which there is a clear and efficient market to establish a monetary value, economists do not typically use the current or official exchange rate to translate the monetary units of this market into a single unit for the world economy since exchange rates typically do not closely reflect worldwide value, for example in cases where the volume or price of transactions is closely regulated by the government.

Rather, market valuations in a local currency are typically translated to a single monetary unit using the idea of purchasing power. This is the method used below, which is used for estimating worldwide economic activity in terms of real United States dollar or euros. However, the world economy can be evaluated and expressed in many more ways. It is unclear, for example, how many of the world's 7.62 billion people have most of their economic activity reflected in these valuations.

Until the middle of 19th century, global output was dominated by China & India. Waves of Industrial Revolution in Western Europe and Northern America shifted the shares to the Western Hemisphere. As of 2017, the following 15 countries or regions have reached an economy of at least US\$2 trillion by GDP in nominal or PPP terms: Brazil, China, India, Germany, France, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Turkey, the United Kingdom, the United States and the European Union.

International trade is the exchange of capital, goods and services across international borders or territories. In most countries, such trade represents a significant share of gross domestic product (GDP). While international trade has existed throughout history (for example Uttarapatha, Silk Road, Amber Road, scramble for Africa, Atlantic slave trade, salt roads), its economic, social, and political importance has been on the rise in recent centuries.

Trading globally gives consumers and countries the opportunity to be exposed to new markets and products. Almost every kind of product can be found in the international market: food, clothes, spare parts, oil, jewelry, wine, stocks, currencies, and water. Services are also traded: tourism, banking, consulting, and transportation. A product that is sold to the global market is an export, and a product that is bought from the global market is an import. Imports and exports are accounted for in a country's current account in the balance of payments.

Industrialization, advanced technology, including transportation, globalization, multinational corporations and outsourcing are all having a major impact on the international trade system. Increasing

international trade is crucial to the continuance of globalization. Nations would be limited to the goods and services produced within their own borders without international trade. International trade is, in principle, not different from domestic trade as the motivation and the behavior of parties involved in a trade do not change fundamentally regardless of whether trade is across a border or not. The main difference is that international trade is typically costlier than domestic trade. This is due to the fact that a border typically imposes additional costs such as tariffs, time costs due to border delays, and costs associated with country differences such as language, the legal system, or culture.

Another difference between domestic and international trade is that factors of production such as capital and labor are typically more mobile within a country than across countries. Thus, international trade is mostly restricted to trade in goods and services, and only to a lesser extent to trade in capital, labor, or other factors of production. Trade in goods and services can serve as a substitute for trade in factors of production. Instead of importing a factor of production, a country can import goods that make intensive use of that factor of production and thus embody it. An example of this is the import of labor-intensive goods by the United States from China. Instead of importing Chinese labor, the United States imports goods that were produced with Chinese labor. One report in 2010 suggested that international trade was increased when a country hosted a network of immigrants, but the trade effect was weakened when the immigrants became assimilated into their new country.

2) INTERNATIONAL ECONOMIC RELATIONS AND MONETARY SYSTEM. COUNTRY BALANCE OF PAYMENTS

A currency in the most specific use of the word, refers to money in any form when in actual use or circulation as a medium of exchange, especially circulating banknotes and coins. A more general definition is that a currency is a system of money (monetary units) in common use, especially in a nation. Under this definition, US dollars, British pounds,

Australian dollars, European euros and Russian rubles are examples of currency. These various currencies are recognized stores of value and are traded between nations in foreign exchange markets, which determine the relative values of the different currencies. Currencies in this sense are defined by governments, and each type has limited boundaries of acceptance.

In most cases, a central bank has a monopoly right to issue of coins and banknotes (fiat money) for its own area of circulation (a country or group of countries); it regulates the production of currency by banks (credit) through monetary policy.

An exchange rate is the price at which two currencies can be exchanged against each other. This is used for trade between the two currency zones. Exchange rates can be classified as either floating or fixed. In the former, day-to-day movements in exchange rates are determined by the market; in the latter, governments intervene in the market to buy or sell their currency to balance supply and demand at a fixed exchange rate.

In cases where a country has control of its own currency, that control is exercised either by a central bank or by a Ministry of Finance. The institution that has control of monetary policy is referred to as the monetary authority. Monetary authorities have varying degrees of autonomy from the governments that create them. A monetary authority is created and supported by its sponsoring government, so independence can be reduced by the legislative or executive authority that creates it.

Several countries can use the same name for their own separate currencies (for example, dollar in Australia, Canada and the United States). By contrast, several countries can also use the same currency (for example, the euro or the CFA franc), or one country can declare the currency of another country to be legal tender. For example, Panama and El Salvador have declared US currency to be legal tender, and from 1791 to 1857, Spanish silver coins were legal tender in the United States. At various times countries have either re-stamped foreign coins, or used currency board issuing one note of currency for each note of a foreign government held, as Ecuador currently does.

Each currency typically has a main currency unit (the dollar, for example, or the euro) and a fractional unit, often defined as $\frac{1}{100}$ of the main unit: 100 cents = 1 dollar, 100 centimes = 1 franc, 100 pence = 1 pound, although units of $\frac{1}{10}$ or $\frac{1}{1000}$ occasionally also occur. Some currencies do not have any smaller units at all, such as the Icelandic krona.

The balance of payments, also known as balance of international payments and abbreviated B.O.P. or BoP, of a country is the record of all economic transactions between the residents of the country and the rest of world in a particular period (over a quarter of a year or more commonly over a year). The balance of payments is a summary of all monetary transactions between a country and rest of the world. These transactions are made by individuals, firms and government bodies. Thus the balance of payments includes all external visible and non-visible transactions of a country. It is an important issue to be studied, especially in international financial management field, for a few reasons.

First, the balance of payments provides detailed information concerning the demand and supply of a country's currency.

Second, a country's balance of payments data may signal its potential as a business partner for the rest of the world. If a country is grappling with a major balance of payments difficulty, it may not be able to expand imports from the outside world. Instead, the country may be tempted to impose measures to restrict imports and discourage capital outflows in order to improve the balance of payments situation. On the other hand, a country with a significant balance-of payment surplus would be more likely to expand imports, offering marketing opportunities for foreign enterprises, and less likely to impose foreign exchange restrictions.

Third, balance of payments data can be used to evaluate the performance of the country in international economic competition. Suppose a country is experiencing trade deficits year after year. This trade data may then signal that the country's domestic industries lack international competitiveness.

To interpret balance of payments data properly, it is necessary to

understand how the balance of payments account is constructed. These transactions include payments for the country's exports and imports of goods, services, financial capital and financial transfers. It is prepared in a single currency, typically the domestic currency for the country concerned. Sources of funds for a nation, such as exports or the receipts of loans and investments, are recorded as positive or surplus items. Uses of funds, such as for imports or to invest in foreign countries, are recorded as negative or deficit items.

When all components of the BoP accounts are included they must sum to zero with no overall surplus or deficit. For example, if a country is importing more than it exports, its trade balance will be in deficit, but the shortfall will have to be counterbalanced in other ways – such as by funds earned from its foreign investments, by running down currency reserves or by receiving loans from other countries.

While the overall BoP accounts will always balance when all types of payments are included, imbalances are possible on individual elements of the BoP, such as the current account the capital account excluding the central bank's reserve account, or the sum of the two. Imbalances in the latter sum can result in surplus countries accumulating wealth, while deficit nations become increasingly indebted. The term “balance of payments” often refers to this sum: a country's balance of payments is said to be in surplus (equivalently, the balance of payments is positive) by a specific amount if sources of funds (such as export goods sold and bonds sold) exceed uses of funds (such as paying for imported goods and paying for foreign bonds purchased) by that amount. There is said to be a balance of payments deficit (the balance of payments is said to be negative) if the former are less than the latter. A BoP surplus (or deficit) is accompanied by an accumulation (or decumulation) of foreign exchange reserves by the central bank.

Under a fixed exchange rate system, the central bank accommodates those flows by buying up any net inflow of funds into the country or by providing foreign currency funds to the foreign exchange market to match any international outflow of funds, thus preventing the funds flows from affecting the exchange rate between the country's

currency and other currencies. Then the net change per year in the central bank's foreign exchange reserves is sometimes called the balance of payments surplus or deficit. Alternatives to a fixed exchange rate system include a managed float where some changes of exchange rates are allowed, or at the other extreme a purely floating exchange rate (also known as a purely flexible exchange rate). With a pure float the central bank does not intervene at all to protect or devalue its currency, allowing the rate to be set by the market, and the central bank's foreign exchange reserves do not change, and the balance of payments is always zero.

GLOSSARY

Active balances Money held for transactions and precautionary purposes.

Actual growth The percentage annual increase in national output actually produced.

Aggregate demand for labour curve A curve showing the total demand for labour in the economy at different levels of real wage rates.

Aggregate supply of labour curve A curve showing the total number of people willing and able to work at different average real wage rates.

Aggregate supply The total amount of output in the economy.

Average revenue Total revenue per unit of output. When all output is sold at the same price average revenue will be the same as price: $AR = TR/Q = P$.

Average variable cost Total variable cost per unit of output: $AVC = TVC/Q$.

An **economy** is a system for coordinating society's productive activities.

Competitive market A competitive market is a market in which there are many buyers and sellers of the same good or service, none of whom can influence the price at which the good or service is sold.

Cyclical unemployment is the deviation of the actual rate of unemployment from the natural rate due to downturns in the business cycle.

Deflationary policy Fiscal or monetary policy designed to reduce the rate of growth of aggregate demand.

Demand curve A demand curve is a graphical representation of the demand schedule. It shows the relationship between quantity demanded and price.

Demand schedule A demand schedule shows how much of a good or service consumers will want to buy at different prices.

Economics is the social science that studies the production, distribution, and consumption of goods and services.

Economic model A formal presentation of an economic theory.

Economic system An economic system is a system of production, resource allocation and distribution of goods and services within a society or a given geographic area.

Employment is the number of people currently employed in the economy, either full time or part time.

Equity means that everyone gets his or her fair share. Since people can disagree about what's "fair," equity isn't as well defined a concept as efficiency.

Equilibrium A position of balance. A position from which there is no inherent tendency to move away.

Equilibrium price The price where the quantity demanded equals the quantity supplied: the price where there is no shortage or surplus.

Equilibrium ('natural') unemployment The difference between those who would like employment at the current wage rate and those willing and able to take a job.

Exchange rate An **exchange rate** is the price at which two currencies can be exchanged against each other. Exchange rates can be classified as either floating or fixed.

Explicit costs The payments to outside suppliers of inputs.

External balance (in the economy) Narrow definition: where the current account of the balance of payments is in balance (and thus also the capital plus financial accounts). Loose definition: where there is a total currency flow balance at a given exchange rate.

External benefits Benefits from production (or consumption) experienced by people *other* than the producer (or consumer).

External costs Costs of production (or consumption) borne by people *other* than the producer (or consumer).

Factor price equalisation The tendency for international trade to reduce factor price inequalities both between and within countries.

Factors of production (or resources) The inputs into the production of goods and services: labour, land and raw materials, and capital.

Financial flexibility Where employers can vary their wage costs by changing the composition of their workforce or the terms on which workers are employed.

Fiscal policy Policy to affect aggregate demand by altering the balance between government expenditure and taxation.

Fixed costs Total costs that do not vary with the amount of output produced.

Fixed exchange rate (totally) Where the government takes whatever measures are necessary to maintain the exchange rate at some stated level.

Forward exchange market Where contracts are made today for the price at which currency will be exchanged at some specified future date.

Free trade area A group of countries with no trade barriers between themselves.

Free-market economy An economy where all economic decisions are taken by individual households and firms and with no government intervention.

Frictional (search) unemployment Unemployment that occurs as a result of imperfect information in the labour market. It often takes time for workers to find jobs (even though there are vacancies) and in the meantime they are unemployed.

Full-employment level of national income The level of national income at which there is no deficiency of demand.

Funding (in monetary policy) Where the authorities alter the balance of bills and bonds for any given level of government borrowing.

GDP (gross domestic product at market prices) The value of output (or income or expenditure) in terms of the prices actually paid.
 $GDP = GVA + \text{taxes on products} - \text{subsidies on products}$.

General equilibrium diagrams (in trade theory) Indifference curve/production possibility curve diagrams that show a country's production and consumption of both imports and exports.

General government debt The combined accumulated debt of central and local government.

GNY (gross national income) GDP plus net income from abroad.

Government budget A government budget is an annual financial statement presenting the government's proposed revenues and spending for a financial year that is often passed by the legislature, approved by the chief executive or president and presented by the Finance Minister to the nation. The budget is also known as the Annual Financial Statement of the country.

Government surplus (from a tax on a good) The total tax revenue earned by the government from sales of a good.

Gross domestic product (GDP) The value of output produced within the country over a 12-month period.

Gross national income (GNY) GDP plus net income from abroad.

Gross value added at basic prices (GVA) The sum of all the values added by all industries in the economy over a year. The figures exclude taxes on products (such as VAT) and include subsidies on products.

Human Development Index (HDI) A composite index made up of three elements: an index for life expectancy, an index for school enrolment and adult literacy, and an index for GDP per capita (in PPP\$).

Incentive An incentive is anything that offers rewards to people who change their behavior.

Income elasticity of demand The percentage (or proportionate) change in quantity demanded divided by the percentage (or proportionate) change in income.

Individual demand curve An individual demand curve illustrates the relationship between quantity demanded and price for an individual consumer.

Individual supply curve An individual supply curve illustrates the relationship between quantity supplied and price for an individual producer.

Inelastic demand (with respect to price) Where quantity demanded changes by a smaller percentage than price. Ignoring the negative sign, it will have a value less than 1.

Inflation is generally defined as a persistent rise in the general price level with no corresponding rise in output, which leads to a corresponding fall in the purchasing power of money.

Investment The production of items that are not for immediate consumption. This can include investment in plant and equipment; such investment builds the stock of firms' capital and yields a flow of future output. Investment also includes adding to stocks of goods or resources which are not sold or used in the current period, but will be in the future.

Joint venture Where two or more firms set up and jointly own a new independent firm.

Labour All forms of human input, both physical and mental, into current production.

Labour force The number employed plus the number unemployed.

Land (and raw materials) Inputs into production that are provided by nature: e.g. unimproved land and mineral deposits in the ground.

Law of comparative advantage Trade can benefit all countries if they specialise in the goods in which they have a comparative advantage.

Law of demand The quantity of a good demanded per period of time will fall as price rises and will rise as price falls, other things being equal (*ceteris paribus*).

Libertarian school A school of thought that advocates maximum liberty for economic agents to pursue their own interests and to own property.

Limit pricing Where a monopolist (or oligopolist) charges a price below the short-run profit maximizing level in order to deter new entrants.

Liquidity The ease with which an asset can be converted into cash without loss.

Macroeconomics is the study of the economy as a whole. Macroeconomics is a branch of economics dealing with the

performance, structure, behavior, and decision-making of an economy as a whole. This includes regional, national, and global economies.

Macroeconomists develop models that explain the relationship between such factors as national income, output, consumption, unemployment, inflation, savings, investment, international trade and international finance.

Marginal benefit The additional benefit of doing a little bit more (or 1 unit more if a unit can be measured) of an activity.

Marginal decisions Decisions about whether to do a bit more or a bit less of an activity are marginal decisions. “How much” decisions require making trade-offs at the margin: comparing the costs and benefits of doing a little bit more of an activity versus doing a little bit less.

Market economy A market economy is an economy in which decisions about production and consumption are made by individual producers and consumers.

Microeconomics is the branch of economics that studies the behavior of individuals and firms in making decisions and the interactions among these individuals and firms in narrowly-defined markets.

Microeconomics also deals with the effects of economic policies (such as changing taxation levels) on the aforementioned aspects of the economy.

Monetary policy is primarily concerned with the management of interest rates and the total supply of money in circulation and is generally carried out by central banks.

Movement along the demand curve A movement along the demand curve is a change in the quantity demanded of a good arising from a change in the good’s price.

Movement along the supply curve A movement along the supply curve is a change in the quantity supplied of a good arising from a change in the good’s price.

Quantity supplied The quantity supplied is the actual amount of a good or service people are willing to sell at some specific price.

Perfectly competitive market A perfectly competitive market is a market in which all market participants are price-takers.

Perfectly competitive industry A perfectly competitive industry is an industry in which producers are price-takers.

Planned economies are economies with a large amount of central planning and direction, when the government takes all the decisions; the government decides production and consumption.

Price - taking producer A price – taking producer is a producer whose actions have no effect on the market price of the good or service it sells.

Price - taking consumer A price – taking consumer is a consumer whose actions have no effect on the market price of the good or service he or she buys.

Shift of the demand curve A shift of the demand curve is a change in the quantity demanded at any given price, represented by the change of the original demand curve to a new position, denoted by a new demand curve.

Shift of the supply curve A shift of the supply curve is a change in the quantity supplied of a good or service at any given price. It is represented by the change of the original supply curve to a new position, denoted by a new supply curve.

Supply and demand model The supply and demand model is a model of how a competitive market behaves.

Supply schedule A supply schedule shows how much of a good or service would be supplied at different prices.

Supply curve A supply curve shows the relationship between quantity supplied and price.

Tax A **tax** is a mandatory financial charge or some other type of levy imposed upon a taxpayer (an individual or other legal entity) by a governmental organization in order to fund various public expenditures.

The opportunity cost of an item – what you must give up in order to get it – is its true cost.

Total (private) surplus Total consumer surplus ($TU - TE$) plus total producer surplus ($TR - TVC$).

Total producer surplus (TPS) Total revenue minus total variable cost ($TR - TVC$): in other words, total profit plus total fixed cost ($T\Pi + TFC$).

Total revenue A firm's total earnings from a specified level of sales within a specified period: $TR = P \times Q$.

Total revenue (TR) (per period of time) The total amount received by firms from the sale of a product, before the deduction of taxes or any other costs. The price multiplied by the quantity sold. $TR = P \times Q$.

Total social surplus Total benefits to society from consuming a good minus total costs to society from producing it. In the absence of externalities, total social surplus is the same as total (private) surplus.

Transfer payments Moneys transferred from one person or group to another (e.g. from the government to individuals) without production taking place.

Variable costs Total costs that vary with the amount of output produced.

Underemployment Where people who want full-time work are only able to find part-time work.

Unemployment rate The number unemployed expressed as a percentage of the labour force.

Unit elastic demand Where quantity demanded changes by the same percentage as price. Ignoring the negative sign, it will have a value equal to 1.

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Compiled by:
M.A. Bolokova
A.K. Dorgushaova

ECONOMICS
Training manual

Подписано в печать 10.01.2020. Формат бумаги 60x84/16. Бумага офсетная.
Печать цифровая. Гарнитура Таймс. Усл. п.л. 5,7. Тираж 300. Заказ 0010.

Отпечатано с готового оригинал-макета
на участке оперативной полиграфии
ИП Кучеренко В.О. 385008, г. Майкоп, ул. Пионерская, 403/33.
Тел. для справок 8-928-470-36-87. E-mail: slv01.maykop.ru@gmail.com