

MACROECONOMICS 201
Spring 2020
NOTES 1
ECONOMICS, AN INTRODUCTION

Reading Assignment:

Principles of Economics: Chapters 1, 2, 3 and 2, Chapter 3(sections 3.1, 3.2, 3.3), & Chapter 20 (sections 20.1, 20.2, 20.3)

Madariaga: Chapters 26,29,62:

At the onset of the course, I wish to emphasize two points. The first is that the most important outcome of taking college courses is to learn how to *think*, in particular, to solve new problems as they arise. The second point is that throughout your lives, you will be confronted with new problems, new knowledge, and revelations that things that you have been taught in the past, including in this course, are, if not completely wrong, in need of modification. The value of your college career, and much of your success in life will be determined by how well you absorb new knowledge, and *face and resolve new issues*. In turn, this will be determined by how well you go beyond rote memorization, and learn to think.

An important observation that you will take from this course, is that macroeconomics has changed immensely during the last 100 years, and is in the process of significant change today, and there are hints of new significant changes that will be taking place as the world adjusts to new realities. One of these realities is that poor people around the world will not be content to stay poor and/or to be unemployed at the same time as a few nations prosper. Better solutions to reduce worldwide poverty will need to be devised. Another reality is that many nations, including the one you live in, are going to have to learn with the problems caused by a rising national debt (caused by citizens wishing to receive government benefits without paying for them).

1. What is the Basic Issue that Gives Rise to the Study of Economics?

The primary rationale for the study of economics is *scarcity*. There simply are not enough resources in the world to produce all of the goods and services *that people desire* (Note the emphasis on “what people desire,” and *not* “on what people need”).

Ask yourself, do you have all that you desire?

Economists are fond of asserting that peoples’ wants are *insatiable* and that the great majority of people will never have enough money to satisfy them or to purchase all of the goods and services that they want. How would you reconcile this generalization with the observation that according to the World Bank, gross savings in China were about 46% of GDP during 2017 as compared to 19% (one of the lowest in the world) in the United States in 2017, in spite of the fact that per capita income in China was much lower. The total savings of a country is roughly the difference between Gross Domestic Income (to be defined shortly) and total consumption and government spending. Total national saving includes personal, government, and business savings (or dissavings). **Warning: there are many different ways to look at a country’s savings, and you will see and/or hear sometimes dramatically different estimates from different sources.**

Do you believe that many people in the world have everything that they desire? Do

you think that, given their high savings rate, the Chinese do? How about Bill Gates or Warren Buffet? Do you think that Mother Teresa was perfectly content to live in and among poverty? Do you think the high savings rate of the Chinese will continue or will their demand for goods and services rise to the level of developed nations? Note that there are many reasons for people to save: e.g., consumption in future years, perhaps for retirement; for a down payment on a home; to protect against the risk of loss of income; to have more assets than other people; etc. Incidentally the huge federal government deficit in the U.S. is one factor pulling down the savings rate, i.e.. It represents public dissavings. Do you think people in some countries put a higher value on maintaining a security net for citizens than people in another country?

Some, probably most, of you work for a business, or even have your own business (or hope to someday). Does your business have a working budget that is sufficient to pay for all of the people it wishes to hire, or to fund all of the research it wishes, or to advertise as much as it would like?

I suspect that most of you will answer “no” to most of the above questions. And that leads us to the study of economics. The basic issue underlying economics is: *given that we do not have enough money/resources to obtain all the goods and services that we want*, how can we get the most out of the money/resources that we do command (you will later recognize this as normative economics). We could also use an alternative formulation: *given that resources are limited*, what determines how are they allocated to the production of the goods and services that we desire (you will later recognize this as positive economics).

Since most peoples’ wants can never be fully satisfied, there must be a system for determining *what* will be produced, *by who*, *how efficiently*, and *how will* this production be **distributed**. Economics is the study of how these systems operate in various countries. The **need** for understanding how the economic system operates follows directly from the pervasive problem of scarcity and the inability to provide for all of our wants and needs, at least at the present time and for the foreseeable future.

2. How is economics defined?

There are many different definitions of economics, all flowing from the underlying concept of scarcity.

- One definition, and undoubtedly the most common, and the one you must remember is, that economics is the study of the (1) *allocation of (2) scarce resources among (3) competing uses*. Remember these three terms.
- Another way to define economics is that it is the study of how people make decisions about what to produce, what to consume, and the identification of the consequences of these decisions e.g., how these actions determine the prices of goods and services, the amounts produced, unemployment levels, inflation levels, the volume and composition of imported and exported commodities, etc.

Unfortunately, these pedantic definitions, by themselves, are not likely to inspire an avid desire to master the science of economics. But as you become more familiar with the theory and practice of economics, you will see that the use of economic theory and practice has

had, and will continue to have, a **major** influence on policies affecting the nation's prosperity and your success in life. Just as examples, economic theory and practice is used, or may be used (usually very imperfectly, and sometimes even harmfully):

- to develop policies to reduce unemployment, control inflation, and increase economic growth - Some of these policies helped us emerge from the great recession and may have prevented us from falling into another great depression (see notes 3);
- to develop policies to help guide import and export policies - e.g., how can we reduce our current large trade deficit (tariffs are **rarely** helpful and almost always harmful - see notes 14);
- to assist you in making rational job and business decisions;
- to assist you in deciding how to spend your budget/paycheck/allowance which in almost most cases will never be enough for all the things that you want (the concept of scarcity again);
- to help think through problems;
- and for many other purposes.

3. Do we need advanced mathematics to teach or understand macroeconomics?

As we will see, perhaps to your surprise, much of what is taught in a survey course in economics (at least my survey course) is based on *common-sense* observations. In consequence, much of what I will teach should be *intuitively* obvious., e.g., the lower the price of a produce, the more people will buy. Based on these intuitive observations, we will develop basic economic concepts, sometimes using very simple math (please review multiplication and division using *decimals*). As (or if) you progress to more advanced economics courses, you will find that very complex mathematical formulations based on these intuitive observations will sometimes be made, and that economists will make extensive use of these mathematical formulations to explore hard data to understand what is occurring in the economy, where and what problems are arising, why these problems are arising, and what to do about them.

My approach in teaching this survey course will be to emphasize an intuitive understanding of economic principles. It is a simple matter, if you later take an intermediate course, to develop equations to reflect this intuitive understanding, It is a waste of time to memorize a bunch of mathematical equations unless you have an intuitive understanding of what the different variables in the equation can tell you.

Almost all of the concepts that are taught in economics are interrelated. In fact, *only* when you finally begin to understand how the different concepts that you will learn in this course are interrelated (probably about two-thirds of the way through the course), will you develop an insightful understanding of economics, its importance, and its uses. I will stress these interconnections as we proceed.

I should also note that much of what we teach in Macroeconomics has been developed during the last 90 or so years since the great depression of the 1930's. In this course, we will show how economic theory has evolved tools for resolving our economic problems, a process that is continuing today (or does anyone think that we have fully solved the problems of unemployment and underemployment, inflation, economic growth, etc) Scholars will unquestionably continue to develop methods of improving the economy during your lifetimes.

The two definitions of economics given above (and many others) are, in practice, virtually identical. What exactly do we mean by the three terms in the **first** definition which is, by far, the most common definition of economics.

4. First term: What is meant by the term “Allocation”?

“**Allocation**,” one of the terms used in our first definition of economics given above, is a critical concept in economics. To fully understand this term, you must distinguish between:

producers - the individuals and organizations who make and/or supply goods and services; and
consumers - the individuals and organizations who purchase these goods and services.

Both producers and consumers **must** make allocation decisions, usually on a continuous, and often tense, basis.

As **consumers**, all of us (or so close to being all that the few exceptions are unimportant) must deal with allocation issues in **multiple ways on a daily** basis. Because most consumers have **limited** amounts of money (and perhaps credit) to spend, then each time people go shopping or pay bills, they must decide on how their limited funds will be *allocated* (e.g., how much they can afford to spend on a car, which type of car to buy (if they looking to buy a car), how much to spend on groceries, which groceries to buy, etc.) Each person, including you, decides, largely intuitively, but in ways that can be generally explained by economic theory, how their limited budgets (or, to use another term, limited resources) will be allocated among savings and the many different consumption items that tempt them.

Now consider **producers**. As you know, many people have varying degrees of responsibility for managing organizations/units that manufacture goods and/or services. These individuals may be the CEOs of large organizations, managers of small units within organizations, managers of a small business of their own, and managers of public agencies (and units within those agencies). Regardless of whether people work for a public *or a* private enterprise, their activities will almost invariably be constrained by budgetary limits. In consequence, they **absolutely** must make decisions about the **methods** of producing goods or services, i.e., what technology to use, the amount and types of workers to hire, when to make capital investments, etc. Often, particularly in the private sector, the **very survival** of their organizations will be largely dependent upon the wisdom and skill with which they allocate their limited resources in the quest to achieve the greatest amount of product for the least amount of cost. Failure to do this will probably lead to losing out to competitors and eventually going out of business

You will continually hear the term “goods and services.” Let us be sure we understand the term. *Goods*, in economic parlance, usually refers to tangible (a physical existence) items, e.g., carrots, cars, syringes, shirts, shoes, socks, etc. *Services* refer to intangible items which people will

pay for, e.g., medical care, haircuts, insurance coverage, taxi rides, teaching, etc, that do not have a physical counterpart and cannot be transferred to others. You will also sometimes hear the term “*commodities*” which is, as we use it, almost always synonymous with goods, but is sometimes defined in a broader sense, e.g., having a good memory is a useful commodity. You have to determine the exact meaning from the sentence the term is used in.

Important: You will also sometimes hear the term, “*economic good*.” To be an “economic good,” the good **must** have a market value, e.g., a positive price. I hate to add to the confusion, but usually an “*economic good*” is defined broadly to include **either** a good or a service. Anything that people are willing to pay for is an economic good. Trash collection (but **not** trash), for example, is an economic good. Again, you must look at the context in which the term is used to determine its exact meaning.

Sorry about all of this. The English language does not have unique meanings for all words.

5. Second term: What is meant by the term “Scarce Resources:”

Scarcity, as we have repeatedly emphasized, refers to the fact that almost all people lack sufficient funds to purchase all the goods and services that they would like, and that almost all enterprises or units within enterprises are constrained by limited budgets from hiring all the people that they think they need, or purchasing all of the capital resources that they would like (e.g., they may not be immediately able to update to the latest computer technology), or undertake some other wished for expenditure.

Scarcity compels consumers and producers alike to make choices in a market system. They must choose among a bewildering variety of goods and services. They must make **tradeoffs** (another often used term in economics and one you **must** remember). Consumers ask such questions as would they rather spent their limited supply of money on a vacation in Europe, on a new car, or save some funds for possible future purchases. Producers ask such questions as which people should be hired, what goods should be produced, etc. Because of scarcity of resources, they must “**tradeoff**” one use for another. There was recently a large tax reduction in the United States. Can you think of some things we might have done with the tax revenues that would have been received if there had been no tax cut. In effect, these alternative use of funds (i.e., reduce the cost of college, improve roads and bridges) were trade offs, i.e., things that could have been done had there been not been a tax cut.

Scarcity obviously results from limited budgets. Often, however, economists define scarcity in terms of **physical** resources. When they do so, economists are referring to the three major categories of **physical** resources needed to carry out the production of goods and services - **land, labor, and capital**. **Burn these three categories of resources into your memories and never, ever, forget them (unless you do not wish to pass this course).**

It must be emphasized, however, that more practical people, like those who manage households, or who run businesses, or units within businesses, or government programs, **think in terms of limited money budgets** (i.e., disposable income/dollars) as we have done above. Both viewpoints of what constitutes scarcity are correct. People who manage producing organizations use their budgets to hire employees (**labor**), to rent or purchase buildings and equipment (**capital**), and to rent or purchase the **property (land)** that the buildings are on (and to purchase needed supplies). From their standpoint, *limited budgets* mean limited ability to purchase the desired amounts of physical land, labor, and capital.

Moreover, consumers, like you, use their budgets, defined by the amount of money that you have available, to buy goods and services that are produced with land, labor, and capital. So ultimately it all comes back to the limited availability of land, labor, and capital resources with which to produce goods and services.

***Optional:** In some cases, business enterprises may be fortunate enough to own the buildings and land they use, and in many cases, they will already have a significant amount of capital equipment, e.g., computers, machinery, etc. that is no longer being depreciated. In these cases, we must distinguish between a money budget (which you are all familiar with), and an additional amount that takes the imputed value of the wholly owned resources available **plus** the dollar amounts available to purchase land, labor, and capital (the money budget) to determine the total amount of resources devoted (or available to be devoted) to the unit's activities. This total is usually referred to as the total economic costs of the activity and for those of you who will someday become involved with measuring economic profits, or conducting benefit/cost analyses, it is a crucial concept. If you doubt this, keep in mind that the imputed value of land and capital owned by business is usually calculated by either: 1) the amount of rent they could receive for these resources; and which they forgo if they use the resources themselves, or 2) an imputed value for the amount of interest that they would receive if these assets were sold and the proceeds put in interest bearing assets; or 3) the interest and depreciation they would incur if they had to borrow money to acquire these assets; or 4) the amount they would have to pay to rent these assets. The amounts estimated by the preceding ways of valuing these resources are not necessarily identical and there is not an agreed upon best way to measure these imputed values. The basic principle that they must be taken into account, however, is rock solid, especially if you wish to compare the **total economic costs** of one business operation with another,¹ or to estimate the actual cost of running your business.*

Some organizations also have access to donated labor, the value of which must be added to the monetary expenses incurred in producing good and services to determine the total value of resources used by the organizations,

Some individuals own their own homes, or grow their own food, or make their own clothing, etc.. They are in an exactly comparable situation as producers who own the buildings and/or land they use or have access to donated labor. The money income of these individuals understates the true value of the resources that they actually have at their disposal. Interestingly, the federal government asks farmers to impute a value for the food that they raise and consume (in some cases) so that this value can be taxed, but homeowners are not taxed on the imputed value of the equity in their homes, at least not for Federal income tax purposes (State and local governments do impose a property tax that taxes the full home value, not just the equity). High levels of home equity constitute a major, often overlooked, reason for differences in living standards among people (e.g., between young people and aged people since aged people often (but not always) own a substantial portion, or all, of their residence).

¹Of course, some of you will probably note that operating budgets are sometimes used to purchase raw materials and partially fabricated goods from other producers (particularly if you are studying accounting), in addition to purchasing land, labor, and capital. You should also observe that the items that are produced by one enterprise and sold to another must themselves have been produced by labor, capital, and land. So again, it all comes back to /the amount of land, labor, and capital available to an economy. (Repetitious)

5A. What makes a resource scarce? A resource is often regarded as scarce, in an economic sense, if it involves a cost, i.e., something must be given up to obtain it. There are other ways of defining scarce resources, but this is a simple and accurate definition

Economists used to delight in talking about *free resources*. Unfortunately, it is almost impossible to identify meaningful examples of free resources. Most economists are reduced to citing air as a free resource, which makes sense when the oxygen in air is used to operate gasoline or diesel engines, but may be questionable if one is concerned about maintaining smog-free air to breathe, or if smog shortens the engine's life. Sometimes research is considered a free resource, but it is also sometimes protected by patents, and in any event, it is only free after you struggle to gain the knowledge (perhaps by taking college courses).

Now you know what is meant when economists say (as they frequently do), "*there ain't no free lunch*." Never forget this term. You will see it throughout your life.

5B. How are physical resources measured?

The terms, land, labor, and capital are not always easy to define empirically, since they have both *quantitative and qualitative dimensions*. By qualitative, I mean the *productivity or ability to produce of* a physical unit of a good or service. Remember this distinction between the quantity and the quality of a resource. It is critical in many areas in economics.

Consider land. Land obviously is measured by square footage or acreage. But clearly, different tracts of land differ in qualitative ways, e.g., fertility and location being the most important. We should also note that economists usually consider raw materials as a component of land, i.e., the minerals that lie within the earth (e.g., coal, iron ore) and some items that grow on it (e.g., lumber, but not farm crops).

Consider capital. It includes buildings and equipment, which can be measured in terms of the number of machines or the amount of square footage in a building used for production. But equipment and buildings also differ by the level of technology (quality) embodied in them. For example, the capability of a computer made today differs dramatically from one made five years ago, although both may be in use.

Consider labor. You can count the number of workers, *or* the number of hours they work, but it is also true that some workers are more productive than others due to differences in inherent abilities, motivation, age, and numerous other factors. Collectively, these are termed qualitative differences. We will return to this **critical** topic later. It is a major factor in determining who is, and who is not, employed and at what wage level

5C. Third term: What is meant by the term "competing uses?"

The remaining term in the first and most common definition of economics was *competing uses* (i.e., uses among which available resources must be allocated). This simply means that almost all people have to make **choices** as to how they use their limited resources. The reasons for this are obvious and the topic has been discussed previously.

As we have emphasized, most consumers and most producing organizations have budgets that will purchase less than these consumers and producing organizations would purchase if they had

unlimited resources. For example, many corporate managers would like to invest additional resources in expanding productive capacity, advertising, training workers, etc., but are constrained by limited budgets. In consequence, they must choose which expenditures would be most advantageous to the business. On the consumer side, people are constantly making choices such as, should they take a vacation this year and if so, where to, or should they purchase a new high definition television set, or should they add to their savings, or should they make any of the myriad other uses of their limited income that they believe would increase their happiness (present and future) in life.

Note how interrelated these three terms are. You cannot define one without reference to the others which led to considerable repetition above - a good thing when learning economics.

6A. Time as a resource. Even though not always included among the basic resources of land, labor, and capital, **time** itself must be considered as a resource that must be allocated among competing uses. Right now, you are using your time to attend a *long* class in economics, You could be doing many other things. For reasons known only to you, you choose to learn a little more about economics. Throughout your lives you will be faced with decisions as to what to do with your time, e.g., read a book, watch a movie, find a part time job, work longer hours, or paint your bedroom, etc. The decision to use time in one way precludes it being used in another. Do not forget the importance of time in making economic decisions. It will show up on an examination.

6B. This leads to the important concept of opportunity costs. This is a term that you will hear *again and again*, both in this course and elsewhere. Basically, a decision to spend money or to use time in one way *necessarily* engenders an **opportunity cost**, i.e., the funds or time used up cannot then be used in another way. More precisely, in economics, *opportunity costs are defined as the value of the next best alternative*. Suppose you eat an apple. In the absence of consuming the apple, your next preferred fruit would have been to eat an orange. The value, to you, of eating the apple is presumably greater than that of eating an orange. In this case, your opportunity cost would be the forgone value/pleasure *you would have placed* on eating the orange. The text (in the first edition) defined opportunity cost in terms of the *price of* the next best alternative. I do not agree. Suppose you had a choice of eating an apple or an orange. You may prefer the orange even if the apple is more expensive. The value of the apple *to you* is less than the orange, even though the orange may be more expensive.

The concept of opportunity costs is frequently used to measure the costs of human service programs. For example, when you calculate the costs of going to college, you normally include tuition, books, transportation, and aggravation. But do you also add in the value of the earnings you could be making if you were not going to college? You should. It is a real and substantial cost for most students.

Here is a *tricky* question for you. Why do economists often not also consider the cost of food, shelter, and clothing that you incur while going to college as a cost of college? Think a little more. Would the answer to this question make a difference to your estimate of the cost of attending college if you were considering living on campus, or living at the home of your parents.²

²If living at home, there may be little or no additional cost for food and shelter. If attending school away from home, these costs may loom large. Nonetheless, economists often do not include them as an extra **COST** of college attendance since you would need to eat and sleep whether or not you went to college.

The notions that one alternative precludes another, time as a resource, tradeoffs, and opportunity cost are closely related. Do not hope for unambiguous distinctions among these terms. If you insist on making a distinction, I suppose you could say that there are many different tradeoffs to the costs of a given activity, but only one is the best available alternative. For example, any one of you could think of many different ways of spending a \$1000 tax return, but only one would be the next best alternative.

What is meant by the term “entrepreneurship.?”

The process of obtaining and organizing land, labor, and capital resources is defined as **entrepreneurship** and basically defines the process by which resources are allocated by managers for purposes of production. It is a *critical* input into the production process. In the competitive profit making world, *differences* in the **quality** (skill) of entrepreneurship usually determines which organizations thrive, or even survive. *Snide remark: Surprisingly, the amount of pay received by managers sometimes (unfortunately) appears to reflect who they know more than what they know or their leadership qualities, or the brilliance of their management decisions, e.g., the huge bonuses and salaries paid to top managers at large banks prior to and after the mortgage crisis, the salaries paid to some political appointees in the government*

Entrepreneurship is as important in the nonprofit world as in profit making enterprises. The skill with which nonprofit enterprises are managed determines the **efficiency and effectiveness** with which these organizations operate, and ultimately, it *may* determine whether these nonprofit organizations survive. After all, most people do not wish to continue funding, or donating to, an ineffective nonprofit enterprise. It does not matter whether organizations are profit or nonprofit, the quality of management, i.e., entrepreneurship, is critical to their success, and, in many cases (but not always), to their survival.

I want to emphasize that it is the **absolute necessity** of survival that pushes most private organizations, which **must compete** with other businesses, to manage their operations effectively and to innovate, a matter which we will continue to emphasize in this course. (Note that most government agencies do not have to compete, and tend to be much less efficient and less effective than firms that must make profits in order to survive). Profit is a powerful incentive, but survival is critical. If you doubt this, look at the extensive changes that GM and Chrysler underwent at the beginning of the great recession, largely in an effort to ensure their survival. Do you know of any public agencies that underwent changes this dramatic in order to improve their effectiveness and efficiency - ever.

Entrepreneurship and **management** usually refer to business enterprises. But when you think about it, it also applies equally to households. Different households have different amounts of money at their disposal and innumerable ways to spend it. One of the frequently overlooked services of housewives (or house husbands, or an unmarried head of household), when attempting to measure their value (as economists periodically try to do) is the value of the way that many manage household finances.

8. Does the study of economics deal primarily in money values?

Many people think economics is primarily concerned with variables that have a monetary value, e.g., wages, prices. Not so. *Anything* that people think is worthwhile spending money on, or allocating scarce resources to, is an economic variable. For example, being a full-time homemaker is as much an economic decision as being employed for money. After all, the earnings that

homemakers could have made if they had chosen employment is obviously one measure of part of the cost of being a full-time homemaker. It also is part of the *opportunity cost* that homemakers should have considered when opting against paid employment, or students should have considered before taking a college course.

Increasing personal satisfaction, or attaining economic security, perhaps by working at a job that is more pleasurable or more secure, even if it pays less, are other examples of legitimate economic variables. The money that these workers give up is a lower estimate of the value that they derive by having a more satisfying or more secure, or less dangerous, or more pleasurable job.

Deriving satisfaction from helping other people is another legitimate economic variable. In all of these cases, people make choices in what they do with their resources and/or time in order to enhance their sense of satisfaction in life. Our main goal is to maintain, and if possible, increase our feeling of well-being in all of our activities, and well-being cannot always be measured solely by the amount spent or earned.³

You sometimes hear a distinction made between *economic variables* and so-called *noneconomic variables* (e.g., psychic well-being, enhanced health, and other variables not normally measured in monetary terms.) This is wrong. The correct distinction is between “easy to measure variables” (usually measured in money) and “hard to measure” variables (e.g., quality of life, the value of homemaking services). Both types of variables are relevant to economics and to decision making.

9. What is rational self-interest?

You **must** understand the term “rational self interest.” Rational self interest means that people (at least most people) make choices that maximize (a term economists like to use) their **well-being**, i.e., people will make the choices that provide them with the greatest amount of satisfaction. In fact, economics typically assumes that people will behave selfishly. You may hear the term, “*homo economicus*.” This simply means “economic man” and assumes that people will behave rationally in such a way as to maximize their self interest, or what they think will maximize their self interest. Rational self-interest, however, does not always mean making the most money, or buying the least expensive product, or making choices that lead to the greatest social good. As a common, but not much commented on example, people, including management, will usually value their job security and personal interests above profits and the future well-being of the firm, or above their obligation to carry out organizational goals (e.g., consider reasons for the frequent malignment of government bureaucrats, and ask yourself if you think it is justified). Even charitable contributions can be attributed to rational self interest if the contributors feel good about donating to a cause. See how interrelated these economic concepts are.

It is true, perhaps unfortunately, that most people will consider their personal well being ahead of social well being or organizational well-being. Ask yourself, do you think that most politicians are more concerned about the nation’s welfare, or their next election, when they make legislative decisions. Most people and economists believe that the incentives affecting their personal welfare (not social, or corporate) will determine most peoples actions, a matter that we will discuss

³ Perhaps we should note that it may be hard to feel good about things if you are poor, ill, envious, or facing some other common malady.

again below.

10. Can all human wants be satisfied?

Most economists believe that we will never have enough resources to produce and supply people with everything that they want (back to scarcity again). No matter how much earnings increase, most people seem to always want more, a bigger TV, a bigger house, a newer, more powerful car, more time spent eating out, more time spent traveling, more leisure, or just more money than their competitor/neighbor, etc. You may not believe it now, but watch how your desires change over time as your income increases.

Over the last 75 years, citizens of developed countries have enjoyed an incredible expansion of consumer goods: TVs, computers, fresh vegetables, stereos, clothing, etc. Nonetheless, as fast as the ability to purchase consumer goods has expanded, the desire for such personal consumption has increased even more. At the same time, our willingness to deal with social problems has not kept pace with our increasing wealth. One might think, for example, that this enormous expansion of goods and services would have enabled us to take better care of the medical needs of all people in this country, or to provide access to advanced education for all, or to resolve the problems of the poor. However, as people have become richer, their willingness to pay taxes to resolve these problems has, if anything, diminished, and these problems have, if anything, grown. Incredible isn't it. It is just something you must live with. Most people are greedy for more material goods (or more wealth), and most will never be satisfied with what they have. The more income that people receive, the less willing many are to pay taxes, an apparent truism that many politicians pander to.

No too many years ago, people used to be happy with a place to live, food to eat, a radio, shelter, clothes to wear, and a little bit for recreation. Now, everybody in a household must have a TV, radios are a dime a dozen, the majority of people are obese, clothes are thrown away after a year, houses have gotten bigger and bigger, and there is no end in sight. Most people in the rest of the world would be delighted if they had what most Americans had 75 years ago. But have faith. As they get richer, they will want more too.

11. What is normative economics and what is positive economics?

One goal of economics is to explain why certain phenomena exist. This is described as “**positive**” (the current text) or “*descriptive*” economics (some other textbooks). As a descriptive/positive science, economics attempts to answer such questions as what determines prices, why are certain goods produced and not others, why are some people unemployed, what determines economic growth, what are the causes of inflation, what are the causes of recessions, how likely is it that a business will fail, etc.

Another goal of economics is to identify ways to *resolve* major problems. When economists describe methods of achieving goals, this is usually termed “**normative**” economics. As a normative science, economics examines alternative ways of achieving social goals, e.g., how can employment be increased, how can inflation be controlled, how can we discourage the consumption of harmful items (e.g., narcotics, cigarettes). As we will see, economics does not always provide clear answers and economists and others inevitably argue about which alternative is superior.

Unfortunately, this definition of normative economics differs somewhat from how the text. The text uses the term “normative economics” for those occasions when an economist makes

statements about what policies or practices he or she believes (hopefully after careful study and consideration) should be followed. I prefer to define normative economics as presenting a range of options for people to choose among for a particular defined goal. For example, if you wish to decrease unemployment, there are, as will be described in this course, numerous ways that may be considered. You may then choose among these options. But note, you may not agree that unemployment needs to be lowered, or you may not agree with the option that is favored by any particular economist, particularly if you do well in this course.

The selection of a goal, and often the preferred option for reaching this goal, requires a value judgement. However, I believe that an economist, speaking as an economist, should never impose his/her value judgements as to what policies should be pursued. The difference between my approach and the text is subtle, but I think important. Instead, I believe that an economist should clearly state that *if you* believe that certain goals should be achieved, e.g., a higher rate of employment, then the following are possible options for achieving this goal, and, if possible, stating clearly the estimated costs and other consequences of each alternative. There are two, almost identical reasons for this position:

- The *personal* values of economists should weigh no more heavily than those of any other citizens;
- An economist, as an economist, **never has the right to impose his or her values on others.**

Even when you agree that unemployment (as an example) should be reduced, there is no certainty that you would agree with the option favored by the economist, particularly since each option has different costs and different results, and affect people differently. Of course, you will hear many economists expressing strong opinions on the types of economic policies to follow. When they do so, they are implicitly imposing a set of values on the listener.

Both descriptive and normative economics are essential to economic policy. Descriptive economics is used to identify problems, e.g., excessive inflation or unemployment, and normative economics is used to identify ways of reducing these problems. We will be using both approaches in this course.

12. What are social goals?

Now macroeconomics starts to become fun. It has long been accepted that there are major social goals (social values) accepted by the great majority of Americans, in fact, by most citizens of most countries. The study of macroeconomics spends much effort in seeking alternative ways to achieve these goals. Among the most frequently cited goals are (expressed in normative terms):

- A. Maintaining a high level of employment (minimizing unemployment)
- B. Avoiding excessive inflation
- C. Maintaining a high level of economic growth.
- D. Eliminating, or at least reducing, poverty
- E. Assuring an equitable distribution of income (whatever that is)
- F. Promoting international trade (a little more controversial).

Other goals, less often cited in this context, but increasingly important, are:

- G. Maintaining fiscal responsibility, which I roughly define as not borrowing money

recklessly, or without purpose, or as a way to avoid taxes. It does not necessarily mean an annual balanced budget, although it should approach a balanced budget over time.

H. Operating public programs effectively and at the lowest possible cost.

I. Ensuring that all citizens have access to health care (currently very controversial, in a confusing sort of way).

J. Ensuring meaningful competition among similar firms in the private sector, which includes such things as ensuring truth in advertising, safe and effective products, enforcement of contracts.

K. Maintaining a country's infrastructure, e.g., adequate roads, public transportation systems, an electrical grid, etc.

K. And more, some that we may discuss later.

Although almost all economists, most politicians (of all parties) and probably all of you, would agree that these are important goals, there is *little* agreement among economists, or anyone else for that matter, as to the best ways to achieve these goals. Some reasons for these conflicts are (which will be discussed further in notes 12):

- One goal will conflict with another. Is it more important, for example, to increase employment, or constrain inflation (Note conflict between Trump and the Federal Reserve)? Is it more important to encourage economic growth, or reduce poverty (by taxing higher income citizens to redistribute income but which might lead to a reduction in savings that would otherwise be invested and would lead to increasing economic growth)? As will be emphasized as we proceed, almost any one social goal will contain points of conflict with almost all of the other social goals.
- Even if people agree on the best balance among social goals, there is uncertainty and disagreement as to how effective a particular action will be in achieving that social goal. How long, for example, does it take higher interest rates to take hold and reduce inflation ?
- Even if we agree on effectiveness, people with different values will argue about which specific policies should be pursued to reach the agreed upon goal. Should we, for example, lower taxes or should we lower interest rates to encourage employment. Should we raise the minimum wage, or should we focus on encouraging economic growth (the trickle down approach) as a way of reducing poverty. These conflicts are based on the different values that different citizens, including each of you, have, and differing opinions about the effects of different actions

Most economists argue vigorously among themselves over these issues. I have no magic answers. By the end of the course, you should be joining into these arguments. Do not be intimidated because someone is an economist. With a little background, your opinions and your values are as good as theirs.

Be aware, disagreements on how to attain the above goals are creating enormous unrest in Europe and the U.S. with potentially extremely dire consequences.

13. What is Macroeconomics?

Economics is usually divided into **microeconomics** and **macroeconomics**.

Microeconomics (micro means small) is devoted to the study of individual units, e.g., consumers, workers, firms, households, etc. It asks questions such as how are wages determined, how are prices established, what determines what and how much will be produced? Of course, some firms are bigger than some governments around the world, and many private firms have larger revenues/budgets than most government agencies, but the study of the prices and outputs of these large firms is still considered microeconomics.

Macroeconomics (Macro means large) is devoted to studying large aggregates issues within a country. For the most part these broad aggregates focus on the major social goals discussed above, particularly unemployment levels, inflation, economic growth, international trade, gross domestic product, and poverty. ETC

14. What is the fallacy of composition?

Basically, this is an important concept (beloved by economists and others) that states that you cannot reason from the particular to the general.⁴ Or in other terms, you cannot say that what is good for an individual is necessarily good for the country. For example, if you are in a theater and a fire breaks out, it might be a good policy for you to run for the exit, but what happens if everyone runs. It might be good for you to retire at age 45, but it certainly would not be good for the country. It might be good for you to speed home from work, but what if everyone speeds? It might be good for bankers to have fewer, or no, regulations concerning their lending activities, but as we have seen, this could be disastrous for borrowers. Or, as we will learn later in the course, in a recession, it might be good for you to save money, but bad for the economy.

15, What is the difference between association and causation; what is multiple causation?

Causation: The difference between association and causation is a critical distinction that you will often be called upon to make, not only in economics, but in any other field that you may study or pursue. Causation means that there is a **direct** link between a variable and an outcome. For example, if you overeat on a daily basis, you will almost inevitably gain weight. If you give a large tax rebate to people, many will increase spending. .

Association: On the other hand, suppose that you count the number of people shopping at Home Depot each year and compare this number with the total population of the U.S.. You will probably find that the greater the number of people shopping in Home Depot, the greater the population (assuming we are not in a recession). This is association, not causation. If Home Depot went out of business, it would make little or no difference to population growth.

You must always look to distinguish associative relationships from causal relationships. As an example, you will perhaps someday, if not already, see statistics that show that children from middle and upper class families are more likely to attend college. Does this mean that children from middle and upper class families are smarter, or is some significant part of the reason because lower income families tend to be less focused on their children's education or less able to afford college tuition (or many other reasons).

Multiple causation: You should also realize that many outcomes are the result of numerous

⁴ A statistician might say that a sample of one has an enormous standard error.

causes, and not any one alone. For example, you are constantly told that the higher the level of education you attain, the higher your earnings will be. On average this is true. But, education, by itself, is not the only reason why earnings rise. People with greater levels of education are probably more motivated, possibly a little smarter on average and perhaps, have more opportunities available to them, maybe/often because of personal and family ties.

Dispersion: You should also be aware that **mean** values (i.e. average values for those who have not yet studied statistics yet), are surrounded by many other values, both higher and lower, e.g. Consider the relationship between education and earnings again. The higher the average level of education of a demographic group, generally the higher the average level of earnings for that group, but not all people with a given level of education will achieve the mean level of earnings for that category. Now consider dispersion (variance for those of you who have had statistics). Dispersion is critically important when evaluating data. For example, you will find college graduates among the unemployed and taxi drivers. At the same time, you will find high school dropouts who become millionaires, and even billionaires. What is true on average, is not necessarily true for each person. Dispersion is critically important for the development of public policy. Unfortunately it is often overlooked. Consider which is more important: (1) the average earnings of U.S. citizens, or the number living in poverty; (2) average years of education, or the number of persons who are illiterate; etc. What do you think?

16. Why Study Economics?

I hope that this question will be answered during the course. But some preliminary reasons are:

- A. So you can make more money after you leave college. Do not be deceived. College will help, but there are many other factors that will determine your vocational success in life
- B. Much of the material taught in economics will help you succeed in the business world where most of you will someday work, especially if it helps you to think critically.
- C. Economics will be helpful in almost any field that you pursue, e.g., urban planning, health care administration, journalism, etc. once you are able to apply economic concepts to new problems
- D. Economics is **crucial** to an understanding of the major issues of the day, e.g., unemployment, inflation, poverty, international relations, taxes, government spending, etc. Hence it will help in assessing the effectiveness of political leadership and possibly help you decide who to vote for.

17. What is the difference between the real economy and the money economy?

This is an critically important and usually misunderstood distinction, but if you wish to do well in this course, I advise you to understand it carefully.

By the *real economy* (later we will describe this as real GDP) we mean the actual physical number of each good and service produced, i.e., how many automobiles, how many bicycles, how many hamburgers, how many shoes, etc.

By the *money economy* (later we will describe this as nominal gross domestic product - GDP) we mean the **total current value** of all of the goods and services produced, e.g., how much is paid for the bicycles that are produced, how much is paid for the shoes that are produced, etc.

Note well: The money value of the real economy will vary depending upon the price level. Another way of stating this is that there can be considerably different levels of the money economy even though the level of the **real economy** (or your living standards) does not change. You cannot consume something if it is not produced.

This distinction will help you understand some of the most critical concepts in the text and will help you understand commentaries presented over television about changes in the economy and what they mean. We will use this distinction repeatedly.

Review Questions:

1. How is economics defined?
2. How macroeconomics different from microeconomics?
3. What do we include in the term, “resources?”
4. What is meant by the term, “scarcity?”
5. Are there any examples of free resources?
6. What is meant by the term “entrepreneurship?”
7. Does the study of economics confine itself to investigating variables that can be measured in money? If not, give two examples of variables not measured in money that are pertinent to economics.
8. What is meant by the term “normative economics?” Illustrate with examples.
9. Can you envision a time in which all human wants are satisfied? Why or why not.
10. What is the fallacy of composition? Can you illustrate by the example of requiring vaccinations of all school children?
11. What is the difference between causation and association in relating one variable to another? If students who drive expensive cars tend to get better grades than students who drive inexpensive cars, is this an example of causation or association? Can you think of an alternative explanation?
12. Is household garbage an economic good? How about garbage collection? Is garbage collection a good or a service?
13. What is meant by tradeoffs?
14. What is multiple causation? Give an example
15. What is the difference between the real economy and the money economy?
16. Why are the concepts of “dispersion” and “multiple causation” important?
17. What is meant by rational self interest?
18. What is the difference between the quantity and the quality of a resource?
19. What is the difference between a “good” and a “service?” Give an example of each.