

Part I: Economic Terms and Concepts

What is Economics?

Economics has often been called the “dismal science,” because it involves the study of “the distribution of scarce resources.” Because resources are limited, and when the demand for resources exceeds the supply of resources, someone is going to have to do without. Those who are left to do without are in a dismal situation; hence, the characterization of economics as the dismal science.

Because Blacks have been in situations in the United States where they have had to do without, it stands to reason that we are familiar with the realities of economics, even though we may not be familiar with economics as a social science.

The study of economics, in its simplest form is the study of supply, demand, and price as depicted by the “Marshallian Cross” in Figure 1 below.

Figure 1.—Supply, Demand, Equilibrium, and Price

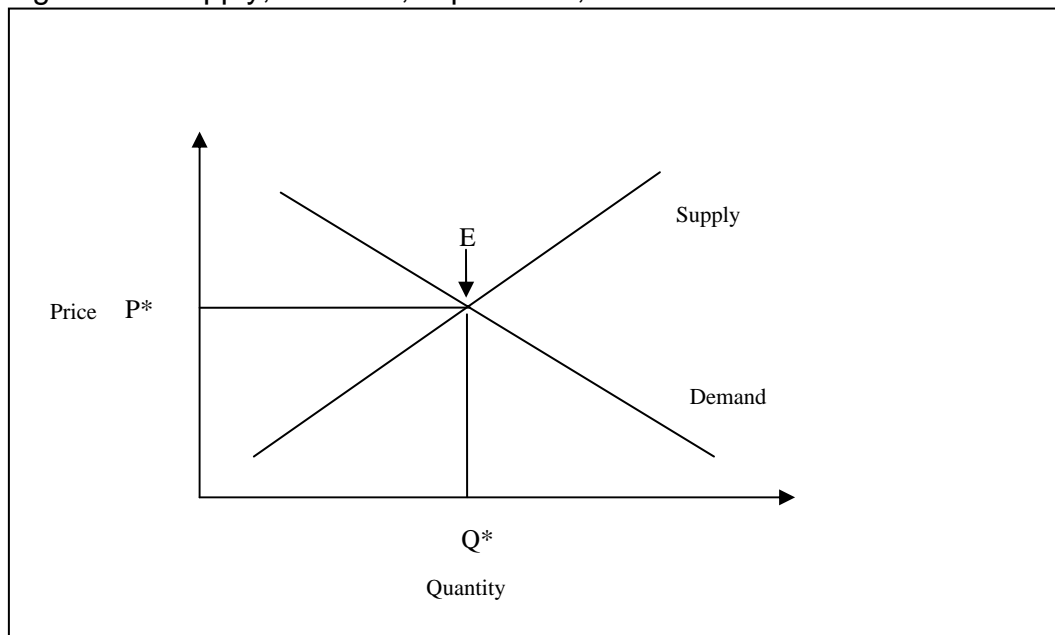


Figure 1 shows a downward sloping demand curve, that indicates that more of a good is demanded as the price of the good falls, and an upward sloping supply curve that indicates that more of a good is supplied as the price of a good increases. Where the supply and demand curves cross is said to be an equilibrium point (point E).¹ The line from this equilibrium point down to the Quantity axis indicates the quantity demanded and supplied at this equilibrium (Q^*). The line from this equilibrium point over to the

¹ By equilibrium we mean that producers and consumers are in agreement on the quantity of the good that is produced and consumed and on the price at which it is sold and purchased.

Price axis indicates the equilibrium price at which suppliers are willing to supply the good and demanders are willing to pay for the good (P^*).

Holding the supply curve in place, increases or decreases in the demand (i.e., shifting of the demand curve out or in, respectively), causes the equilibrium price to rise or fall, respectively. Similarly, with supply, holding the demand curve in place, increases or decreases in supply (i.e., shifting of the supply curve out or in, respectively), causes the equilibrium price to fall or rise, respectively.

Simply put, when consumers want (demand) more of a particular good, then it is likely that the price of the good will rise. Demanding less of a good will cause its price to fall. Conversely, when producers supply more of a good, then it is likely that the good's price will fall. A decreased supply is likely to cause the price to rise.

Economics, at its core, is the study of what consumers demand, what suppliers produce, and the resulting price of goods and services in the market place.

It is important to caveat the foregoing with the point that it represents a classical view and that characterization of “perfectly competitive” markets or a purely monopolistic market and the range of market types in between (e.g., duopoly or oligopoly) would cause Figure 1 to change substantially. Such characterizations are beyond the scope of this book. However, I urge readers who are motivated to explore these special market cases and the range of market types to do so with vigor.

Finally, we should not be mystified by the discussion of quantities produced and sold and prices. It is really quite simple. If you had the capacity to produce a product and introduce it into the marketplace, you would set a price for the product above your cost of producing the product so as to earn a profit. If consumers do not purchase the product at that price, then you would likely lower the price. Conversely, if consumers scoop up the product at a rapid rate, then you are likely to raise the price to earn a larger profit. This is the very game that that you as a consumer or producer play in markets where products are produced and sold each day.

What is a Market?

As you can imagine, economists' use of the term market may be linked ultimately to the scene that we are all so familiar with when we think of "farmers' markets." That scene, in turn, is very much consistent with what Europeans may have witnessed when they landed on the coast of West Africa to find African entrepreneurs gathered in market places exchanging their wares. Alternatively, Europeans may have come in contact with the idea of markets when they trudged to the Middle East to fight the Holy Wars. Of course, Middle Easterners may have first learned much about markets from remnants of the Indus Valley Civilization that extends back seven thousand years. Whatever the origin, the concept of market is characterized by the meeting of sellers and buyers who willingly engage in transactions. Sellers have goods to sell and buyers want to acquire these goods. How they determine the price or rate of exchange and what they use to consummate the transaction (money, sea shells, other goods, pledging of the purchaser's labor, etc.) differs through time and space. However, the constant feature of the concept of markets is that sellers and buyers are able to exchange goods and services.

Today, we can add to goods and services, ideas (intellectual property). In addition, the idea of exchanging goods, services, and ideas in the market here and now is too restrictive; future markets are very much a part of today's landscape, where buyers and sellers agree to exchange goods, services, or ideas at some future point. Interestingly, as opposed to determining a specific rate of exchange or price, market participants can gamble on the rate of exchange in what are now called derivative markets, where the rate of exchange is linked to the occurrence or non-occurrence of particular events.

Markets that constitute a scourge in the hearts and minds of Black Americans are the human markets that facilitated slavery in America. Unfortunately, things haven't changed very much over the past 400 years. Don't forget, draft and trading days for the National Football League or the National Basketball Association features the buying and trading of Black and White human flesh in a market.

In the United States, we transact for goods, services, and ideas in an economy that is called a market economy. It is a hybrid market because it is not completely competitive (there are many monopoly and oligopolistic-type markets) and it includes a great deal of socialistic principles (from Social Security to "corporate welfare").

A key factor that must be kept in mind is that the U.S. economy is labeled an open economy or market. Why? Because, U.S. firms have very few barriers to overcome in buying and selling across borders. The North American Free Trade Association (NAFTA) is just one legal arrangement that permits the relatively free flow of goods and services across U.S. borders.

As a Black American participant in markets, what should you be concerned about? First, do your homework to ensure that you are able to conduct advantageous

transactions; i.e., purchase the goods, services, and ideas that you desire at the lowest possible price—given the features and quality required to meet your needs. The evidence is that many sellers in the market place make every attempt to create an un-level playing field when they transact with Black Americans—mainly charging more than they charge White and other Americans.

On the flip side, Black Americans are more and more becoming sellers in the market place. Given the environment that we operate in, we would be naive to request that you be “fair” in your market transactions. In the U.S. economy, the market is not always fair. Every firm participates in a strategic game as it seeks to optimize profits; that is to buy low and sell high. Consequently, we will conclude this entry by saying, “In the market, ensure that you transact in your own best interest and to your optimal advantage.” Isn’t that what the great European economists Adam Smith advised?

What is Wealth?

First, let us be clear about what wealth is not. In its truest form, wealth or “capital,” is not paper money. To have wealth is to have resources to produce goods or services, which can be used to satisfy the needs and desires of those who wish to consume them.

Wealth can be land, which can be used to produce food, to produce trees for lumber to construct buildings, or to produce a golf course that can be used to provide recreational services. Wealth can be a structure, which can be used to provide shelter for a family and in which the family can conduct its affairs, to provide space for a manufacturer to organize equipment and workers to produce goods like computers or toys, or to provide space for firms to establish offices to provide health, legal, or medical services. Similarly, wealth can be a road, bridge, or airport runway that can be used to provide transportation services.

Wealth can be equipment, which can be used to build roads or bridges, to construct buildings, to make other equipment or other goods, or to serve as a producer of services, for example projectors that display films in theaters, or vacuum cleaners that clean offices, or airplanes, trains, buses, trucks, and cars, that provide transportation services.

The wealth mentioned thus far is often called “tangible” wealth. Intangible wealth is also very important. For example, the knowledge that is stored in your brain from learning over the years is called “human capital” or human wealth. Your knowledge is used to perform functions that lead to the production of goods, services, or more human capital. Another type of intangible wealth is a database or computer software. Databases and computer software enable their owners to produce goods and services in a fashion that is akin to the production of goods and services by other forms of capital. Computer software is being used to produce this page for this book. A database at BlackEconomics.org was used to send the pages of this book to experts who assisted in editing and refining the thoughts on the pages of this book.

Again, wealth is not paper money, stock certificates, or bond documents. The latter represent (are proxies for) financial assets and wealth. Wealth is the resources that may be linked to, or acquired by, the paper money or stock bond certificates that you own. Wealth is that which can be used directly to meet needs and fulfill desires, or that can be used to produce new wealth.

What is Money and What is the Federal Reserve System?

Money

Have you every played the game Monopoly? Do you recall the “money” that is used in that game? Did or do you think of Monopoly money as “real” money or just paper? Well, even in the real world, money is just paper. The key point to remember is that, whether you are playing a Monopoly game or life’s real game, money is valuable only in that it can be used in exchange for a good or a service that is of value to you. We all value money because we can exchange it to obtain goods or services to meet our needs or fulfill our desires.

Around the world today, the money that nations use is called “fiat” money; i.e., it is paper, the value for which is determined by the governments that issue it. Money’s value is based on the owning government’s willingness to guarantee that users of the money can exchange the money for goods or services that are commensurate in value with the value listed on money. The same nations, by their policies, determine the value of the money in their economies.

In the past, money in most nations was backed by precious metals: Gold or silver. However, in 1934, a conference of world bankers at Bretton Woods, New Hampshire began the process by which nations began to de-link their currencies from precious metals. In 1971, the United States completely de-linked its currency from precious metals.

The real importance of money is that it facilitates exchanges. Without money, economic agents would always have to find other economic agents with opposite needs and desires; there would have to be, what economists call, a “coincidence of wants.” That is if you were a lawyer in need of a suit, you would have to find a tailor who needed an attorney. You would exchange your legal services for the suit that only the tailor could produce.

The Federal Reserve Banking System

The Federal Reserve Banking System is the mechanism that keeps our economy supplied with money. In reality, the U.S. Department of the Treasury is responsible for providing the actual money; it is produced at the U.S. Mint. However, the Federal Reserve System is responsible for the operation of the banking system in the nation. Banks and other financial institutions facilitate the smooth flow of money through the economy through their acceptance of deposits, their creation of checking, saving, and other types of accounts, and through their lending of money to borrowers.

The Federal Reserve System includes the Federal Reserve Board in Washington, D.C. and the 12 Reserve Banks that are located in Atlanta, Boston, Chicago, Cleveland,

Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, San Francisco, and St. Louis. The Federal Reserve Banks monitor commercial banks in their regions and ensure that they operate using sound practices.

The Federal Reserve Board, which has a chairman and six rotating board members (board members represent banks in the system), is an independent agency of the Federal government that is responsible for controlling the money supply in the U.S. economy. The Board controls the money supply by raising or lowering interest rates or by buying or selling Federal Securities (namely U.S. government bonds) through the U.S. Treasury.

The Federal Reserve Board and banks in the system work to keep the economy growing; they also manage the economy to ensure that inflation remains at a reasonable rate. In its economy-managing efforts, the Federal Reserve Board monitors the growth and contraction of several monetary measures—three key measures being:

- M-1 = Currency (coins and paper money) and most checkable deposits (excluding those owned by the U.S. government, the Federal Reserve Banks, commercial banks, or other financial institutions);
- M-2 = M1 plus near monies, including savings deposits, time deposits, and money market mutual funds.
- M-3 = M2 plus large time deposits that are usually owned by businesses as certificates of deposits.

In a nut shell, money is the oil that lubricates the economy, and the Federal Reserve Board serves as the mechanic tasked with applying an appropriate amount of lubrication depending on how the economic machine is operating.

It is worth noting that there have been a total of three Black American Federal Reserve Board Governors: Andrew F. Brimmer (1966-74), Emmett J. Rice (1979-86), and Rodger W. Ferguson (1997-2006).

What is a Price?

Everyone comprehends the basic concept of price. It is the amount, in money, goods, or services that you agree to pay in exchange for products, goods, or services that are required to fulfill your needs or desires. The “price” concept extends to transactions that we do not normally consider in a “price” context: e.g., the price for labor is a “wage”; the price at which one borrows money is an “interest rate”; “taxes” may be viewed, in part, as the price that you pay to receive the benefits that governments offer at the city, state, or national level; and the price at which international travelers or transactors exchange money is an “exchange rate.”

In a “market” economy (the type of economy that we experience in the United States), price is usually determined by supply and demand (see Figure 1 in the entry on “What is Economics?”). The leading edge of price determination, however, begins with supply. First, producers come to understand that there may be demand for a product. Second, they estimate the amount (price) that consumers may be willing to pay for the product. Third, they calculate whether the product can be produced at a cost that will result in a sufficient profit (i.e., price less cost) to warrant the production of the good. In making this calculation, producers focus on the price that they must pay for the inputs that are required to produce the product

To optimize assets and wealth, the goal is to negotiate and pay the lowest possible price for products, goods, and services that meet your requirements (in many cases, a lower price is associated with lower quality products, goods, and services). Unfortunately, because of racial discrimination, there has been a history of Black Americans being charged (forced to pay) higher prices than other groups. For example, research shows that Blacks are often charged higher prices than those paid by other groups. Specifically, it is widely known that Blacks are often charged higher prices for cars; for loans of all types (interest rates for mortgages, car loans, installment loans, credit cards, etc.); for rent, for insurance; and for goods and services that are sold in Black communities.

What is Inflation?

Inflation is simply the rate at which prices change in the economy. For example, if the price of a meal at Restaurant X for you and your family was \$50.00 last year, but the price for a comparable meal increased to \$55 this year, then the price has increased by \$5 or by 10 percent. In this case, economists would say that you have experienced a 10 percent inflation rate in meals at Restaurant X. Be certain to avoid a common misperception about inflation. That is, recognize that inflation for product Y, which increases in price from \$1,000 in year one to \$1,100 in year two is the same as inflation for product Z, which increases from \$100 in year one to \$110 in year two; both products experience 10-percent inflation.

The primary source of information about price change or inflation in the U.S. is the Bureau of Labor Statistics (BLS, www.bls.gov), which is a sub-agency of the U.S. Department of Labor. BLS measures not only changes in prices of products, goods, and services that are normally purchased by consumers (the Consumer Price Index (CPI)), but BLS also measures changes in prices of commodities that are normally purchased by businesses (the Producer Price Index (PPI)). Both the CPI and PPI are measured using price information about literally hundreds of products. BLS also prepares an index that reflects the prices of goods that are exported by, and imported into, the U.S. called the International Price Index (IPI). Each of these BLS indexes is prepared on a monthly basis.

It is important to keep in mind that, in measuring price change, one must compare changes in the price of products that are essentially the same. If a long-standing product (A) that has a particular set of characteristics is replaced in the market by a new product (B) with a different set of characteristics, then the change in price that you see from product A to product B represents both “pure price change” and “quality change.” The BLS measures price change on a “constant quality” basis; i.e., they attempt to ensure that they account for changes in the characteristics or quality of products.

In today’s technological world, certain products (say computers or video game devices) continue to improve in quality (i.e., they include increasing and improved characteristics), yet they often reflect either little to no increase in price or even declines in price. In these cases, because the purchaser is getting “more” for the same dollar amount or even fewer dollars, then BLS estimates that there has been a decline in price, or deflation (disinflation).

As an observer of, and participant in, the economy, you will find that there tends to be a close association between inflation and interest rates. This is not an odd outcome, because an interest rate simply represents the price that you pay to borrow. The link between these two economic measures may be explained in the following way. Begin with businesses that produce goods for the economy. First, the cost of borrowing goes up for businesses; i.e., interest rates rise. Second, in order to pay the higher cost of borrowing, businesses raise the price of the goods that they produce to maintain their

profit margin. Thus, we have an increase in interest rates and an increase in price and inflation. The reverse is also true. At a lower borrowing cost (lower interest rate), producers can lower the price that they charge for their goods and still retain the same profit margin.

Here are a few key points to remember about inflation:

1. The Federal Reserve Board strives to keep inflation under control.
2. If economic conditions are such that inflation is expected to continue for some time, then it may be wise to borrow at the beginning of such an inflation cycle if a fixed interest rate can be locked in. Under inflation, because wages (income) may increase as inflation increases, one may receive increasing amounts of income to pay off fixed loan payment amounts.
3. If inflation gets out of control (hyper-inflation), the economy suffers because of the uncertainty associated with price increases; it becomes very difficult to make business and other types of plans when prices are changing so rapidly. Under these circumstances, a great deal of energy must be expended just to plan to keep up with the rise in prices and to prevent economic harm that can be caused by inflation.

For 2006 (December over December), the CPI (All Urban Consumers – All Items) increased 2.5 percent; the PPI (Finished Goods) increased 1.1 percent; and International Price Indexes increased 2.5 (imports – All Commodities) and 4.5 (Exports - All Commodities) percent, respectively.

Unfortunately, BLS does not measure separately the changes in prices (inflation) that are faced by those living in predominantly Black American communities across the country. The hypothesis is that inflation may be higher in these communities.

What is an Exchange Rate?

An exchange rate is the rate at which one currency can be exchanged for another currency. For example, on July 9, 2007, the dollar-to-euro (€, the currency for European Union nations) exchange rate was € 0.73. That is one dollar would purchase .73 euros. The reverse calculation is that the euro-to-dollar exchange rate is \$1.36. That is, a euro would purchase 1.36 dollars.

As noted in the entry on “What is a Price?” an exchange rate is just a price that you pay for one currency in terms of another currency. The price is, in part, determined in the foreign exchange market based on demand and supply. Economic agents throughout the world demand a certain amount of a particular currency; the nation that owns that currency is willing to supply a certain amount, and the two quantities (demand and supply) determine, in part, the price.

We say “in part” because the value of very few currencies are permitted to be solely determined by market forces (i.e., very few currencies are allowed to “freely float”). Depending on where a country is in its business cycle, it may be favorable to have a strong (sell at a higher price—less of your currency in exchange for a unit of another currency) or a weak currency (sell at a lower price—more of your currency in exchange for a unit of another currency). Therefore, most nations intervene in the market to control or “manage” their currency’s exchange rate. Some nations attempt to have a fixed (or pegged) exchange rate; i.e., the currency’s value is maintained at a fixed amount relative to certain other currencies. Other nations adopt a “managed” exchange rate regime; a so called “dirty float” regime where the value of the currency is allowed to fluctuate relative to certain other currencies. Certain countries adopt a currency banding strategy, where they allow the value of their currency to fluctuate relative to the value of a band (group) of certain other currencies.

When, due to market or other conditions, a currency rises in value (less of the currency must be exchanged for another currency), we say that the currency has “appreciated.” On the other hand, when a currency falls in value (more of the currency must be exchanged for another), we say that the currency has “depreciated.”

You might think that there are many nations and many exchange rates, and that there may be opportunities to earn money by trading currencies in such a way as to take advantage of differences in exchange rates across three or more countries. For example, suppose we had the following situation:

Currency X to Currency Y exchange rate = 1.43
 Currency X to Currency Z exchange rate = 0.20
 Currency Y to Currency Z exchange rate = 7.25

In this situation, one could take 1.43 units of currency X, purchase one unit of currency Y, use the one unit of currency Y to purchase 7.25 units of currency Z, and then use the

7.25 units of currency Z to purchase 1.45 units of currency X, which is .02 more units of currency X than you began with. A 0.02-unit profit on the transaction is not very much in and of itself, but when currency “arbitraders” conduct such transactions in thousands or millions of units, the small unit profits produce large overall profits. It was feasible to conduct arbitrage transactions of this type before international computer networks were established. However, today, with the world being so tightly connected electronically, it is difficult to identify or to take advantage of even very small differences in exchange rates across a variety of currencies.

You should know that there are “futures” currency markets. That is, in case the need arises, you can make a contract to buy or sell currencies at a particular point in the future at a rate that is agreed upon in the current period. The problem with such futures transactions is that there is uncertainty as to whether the exchange rate will remain the same or change in your favor or disfavor between the current period and the futures contract settlement date. To avoid this risk, many futures contractors “hedge” their risk by making offsetting contracts: One that anticipates a rise in exchange rates and one that anticipates a fall in exchange rates.

Of possible interest, the U.S. dollar-to-Nigerian Naira exchange rate was 128.38 (i.e., a U.S. dollar bought 128.38 Nigerian Naira) on August 6, 2007. As you know, Nigeria is the most populous African country and has Africa’s second largest economy.

Source: <http://www.x-rates.com/>; retrieved from the Internet on July 9, 2007 and August 6, 2007.

What is Gross Domestic Product (GDP)?

Gross domestic product (GDP) is a measure of the value of all the “final” goods and services (output) that are produced in an economy during a year. The term “final” is important in this definition because “intermediate” products are not measured in GDP. For example, the value of the bread that you purchase from a grocer to consume is in GDP; however, the value of the seed and fertilizer that the farmer purchased to grow the wheat, the value of the wheat that was purchased by the mill to produce the flour, and the value of the flour that was purchased by the baker to produce the bread are considered intermediate goods and are not included in GDP. If the value of all of this intermediate output were included, GDP would be overstated.

The responsibility of producing measures of GDP for the U.S. is assigned to the Bureau of Economic Analysis (BEA, www.bea.gov) of the U.S. Department of Commerce. BEA, the nation’s national accountant, measures GDP using three traditional techniques:

1. Expenditures: The value of expenditures for the final goods and services that are produced in the economy. The traditional equation for measuring GDP using this approach is:

$$GDP = Consumption + Investment + Government + Net Exports$$

Where “Consumption” is expenditures by consumers; “Investment” is expenditures for nonresidential structures, private equipment and software, residential structures, and change in private inventories; “Government” is expenditures by the government to produce services and to invest in structures and equipment (military and civilian); and “Net Exports” is the value of “Exports” (goods and services sold abroad) less the value of “Imports” (goods and services purchased from abroad).

2. Income (Gross Domestic Income (GDI)): The value of the income (wages and salaries and property income (interest, dividends, etc.)) that is earned in the production of the goods and services produced in the economy.
3. Value added, which is equal to gross output less intermediate inputs: Gross output is the value of all, not just the final, goods and services produced in the economy. Intermediate inputs is the value of all inputs (labor, materials, supplies, services, etc.) that are required to produce gross output.

In the national accounts produced by BEA, measurement techniques 1 and 3 are constrained to be equal. Theoretically, all three measures should be the same. However, because the output and income measures are derived using different source data and estimation methods, they usually differ. The difference between the output (expenditure and value added) and income measures is labeled by BEA as the “Statistical Discrepancy.”

BEA prepares the output measures in current (nominal output) and in constant (real output) prices. Nominal output is the actual value in market prices of output produced in

the economy; real output reflects adjustments to nominal output to remove price change. The latter measure makes it possible to compare output measures from year-to-year. For example, if last year GDP was valued at \$100, but it is valued at \$110 this year, it is clear that nominal output has increased. However, has real GDP increased? It depends on the rate of inflation. If there was no inflation, then real GDP would have increased by 10 percent (from 100 to 110). However, if inflation increased by 10 percent, then real output would not have increased at all because real output measures are calculated by removing inflation from nominal output growth; in this case, we would remove 10 percent inflation from 10 percent nominal output growth to produce 0 percent real growth.

GDP is often used as a gauge of the “business cycle”; i.e., when the economy is increasing or declining. A traditional yardstick for when a recession occurs is that GDP must decline for two or more consecutive calendar quarters. A depression is marked by an extended period of declining GDP. It is important to remember that the official determiners of when a recession occurs in the United States is the National Bureau for Economic Research (NBER; <http://www.nber.org/cycles.html/>).

For 2006, nominal GDP was \$13.2 trillion, while real GDP was \$11.3 trillion (in 2000 dollars). Nominal GDP grew 6.1 percent, inflation as measured by BEA grew 3.2 percent, and real GDP grew 2.6 percent. GDI was \$13.2 trillion, and grew 6.3 percent.

It is estimated that Black Americans earned about \$486.7 billion in income during 2005 (<http://www.bls.gov/cex/2005/Aggregate/race.pdf>); that is Black earnings accounted for about 4.0 percent of GDI (\$12.4 trillion). This level of earnings is larger than the nominal GDP of any Black controlled country in the world and, if considered as a separate nation, would rank Black Americans as one of the top 20 nations of the world.

What is Income?

Generally, we think of income as the money that we receive in return for labor services that we provide. However, income can be defined in broader terms. Income may be defined as the return on any product, service, or asset that we place in the market place in a productive capacity—whether extended during earlier or the current period. Therefore, income can be defined to not only include the wages and salaries that we receive for our labor services, but it may also be defined as the monetary (pecuniary) or other returns/resources that we receive for products and other services that we produce. It may also include the returns that we receive on other owned assets; e.g., equities (stocks or mutual funds), bonds or bills, commercial paper, certificates of deposit, and saving and other types of financial accounts (i.e., interest, dividends, and capital gains).

Income can also be obtained in nonmonetary form; that is “in-kind” income. For example, if goods or services are received in response to participation in a government-sponsored program such as Medicaid, Temporary Assistance to Needy Families (TANF), or the Women and Infant Care (WIC) program, then the products and services received through these programs are considered in-kind income. The Food Stamp program falls into this category, although it has become essentially a cash program, because food stamps often function as “near money.”

In the national economic accounts, the following types of monetary income are identified as being received by persons: Wages and salaries, farm and non-farm proprietors’ income, dividends, interest, rental income. The following types of nonmonetary or in-kind incomes are listed: Wage and salary supplements (mainly employer contributions to health and social insurance (Social Security)) and transfer payments from government.²

Measures of income are important because, among other things, they are used to define who is above or below the poverty line. Historically, Black Americans are disproportionately represented in the population defined to be in poverty. For 2005, the U.S. Census Bureau reported that 24.7 percent of the 38.6 million Black Americans (9.5 million) were in poverty.

Median household income is also an important measure, because it indicates that half of the nation’s household are above and half are below this level. In 2005, median household income for the nation stood at \$46,326. Median Black American household income stood at \$30,954.

Source: <http://www.census.gov/hhes/www/income/income.html>; retrieved from the Internet on July 27, 2007.

² It is worth mentioning that employees also make contributions to health and social insurance.

What is Saving?

Typically, we think of saving as the process by which we place surplus funds in a bank. In reality, saving is characterized by an excess of output over consumption—whether that output be measured using monetary income or the value of products and services. Therefore, if you earn wages and salaries and the value of what you spend on goods and services is less than your earnings, then you have experienced saving. Similarly, if the value of the goods and services that you produce exceeds the value of the inputs that are required to produce those goods and services, then you have experienced saving. Notably, investment in a productive asset is also deemed to be saving; i.e., the purchase of a commercial structure or equipment, which may be used to produce future income. If spending exceeds earnings and if the value of productive inputs exceed the value of output, then dissaving occurs.

In national accounting terms, there are saving measures for each key sector in the economy: Households, nonprofit institutions, government, financial corporations, nonfinancial corporations, and the international sector. If one aggregates the saving/dissaving of each of these sectors, one can determine the value of national or economy-wide saving.

Two closely watched saving measures are household or personal saving and government saving. The national accounts indicate that saving by individuals (personal saving) has been very low or negative during the past half decade or more. Naturally, firms are very interested in personal saving because it serves as a barometer of consumer spending—the more saving that consumers have, the greater their spending is likely to be. In recent history, the Federal government has been more of a dissaver than a saver. State and local governments have a rosier history, mainly because they face legal restrictions concerning dissaving. The Federal government accounts for much of its dissaving by borrowing funds mainly through the sale of U.S. bonds and notes (securities). Some economists believe that government borrowing to cover its dissaving can be very harmful to the economy during particular phases in the business cycle because it “crowds out” business and private borrowing, which could fuel the formation of productive jobs.

Saving is important because it serves as a source to draw upon in hard times. Saving also constitutes the wherewithal to invest and create new sources of income.

Today, statistics show that Black Americans save little when compared to Whites, or are dissavers. This has not always been the case. The noted scholar W.E.B. Dubois performed key studies during the early part of the 20th century that showed that Blacks in the southern region of the U.S. were higher savers than Whites during the period immediately following the Civil War through the early 1900s.

What are Interest Rates?

As stated in the “What is a price?” entry, interest rates are the prices that borrowers agree to pay lenders in exchange for the use of the latter’s monetary resources. For example, if you were a lender who loaned me \$100 at an interest rate of 10 percent, and I agreed to the loan arrangement, then I would be obligated to not only return the \$100 dollars to you at the end of the loan period, but an additional \$10 in interest. So the price of the loan was, in essence, the 10-percent interest rate—the rate or price at which the money was borrowed. One may view the interest rate as the price per dollar (in this case \$0.10) or the price for the entire loan (\$10.00). While the interest payment is a type of service fee paid for the use of borrowed funds, the price for the service is the interest rate.

There are numerous types of interest rates. For example, there are interest rates on home loans or mortgages (mortgage rates); car loans; saving accounts, money market funds; interest bearing checking accounts, U.S. Saving Bonds, U.S. Treasuries, U.S. T-Bills, credit card accounts, and even pay-day credit accounts.

Traditionally speaking, interest rates, like most other prices, are determined by the demand and supply of funds that are available for lending. However, the Federal Reserve Board, in its role of controlling the money supply, plays an important role in determining the amount of funds that are available for lending. In addition to the pure supply and demand basis for interest rates, most lenders factor up the interest rate with a so-called “risk premium.” That is, interest rates are usually adjusted up to reflect the risk (that the borrower may default on the loan) that the lender assumes by extending the loan. The higher is the risk per borrower, then the higher the risk premium and the overall interest rate.

Another factor that determines interest rates is the perceived level of access to lenders. If a customer has access to many lenders who must compete to extend loans, then this competition is likely to assist in keeping interest rates at a level that is lower than they would otherwise be. However, if lenders perceive that borrowers have little choice in lenders, then competition may not be sufficient to hold interest rates down. In these cases, lenders feel empowered to charge higher interest rates. This is particularly true for those in poverty who have a poor or no credit history; often they are obliged to turn to lenders who charge usurious (very high) interest rates.

The economic literature reflects the reasons why Black Americans have traditionally paid higher interest rates on loans than other groups in America. Financial discrimination is illegal, and regulated lenders must be able to show that their formula for determining interest rates is applied consistently to all customers.

Notably, certain African cultures that are Islamic in nature forbid the charging and payment of interest on loans.

What is Investment?

As discussed in the “What is saving?” entry, surpluses that results when one expends less than the value of what one produces is called saving. What happens to saving? If the saving is in the form of money, then there are at least two options. First, one can retain the money in cash (hide it under the mattress). Second, one can invest the funds in a variety of financial instruments (saving accounts, money market funds, individual equities (company stocks), mutual funds, notes, bills or bonds, etc.), or in tangible or intangible property (land, residential or nonresidential structures, equipment, jewelry, art, or goodwill). In either case, the investor obtains investment assets.

In a purely theoretical sense, all investments are intended to be used to produce future earnings. In the case of tangible and intangible property, investments are expected to have an extended useful life; i.e., longer than one or three years depending on the investment item. Assets that qualify as investments (their nature and holding period or useful life) are determined by tax law through the U.S. Internal Revenue Service.

Earnings on certain financial investments produce “interest” earnings (saving accounts, money market funds, certain mutual funds, and notes, bills or bonds, etc.); and earnings on other financial investments produce “dividend” earnings (corporate equities and certain mutual funds). Investment in tangible or intangible property produces “capital gains” earnings. As you know, these earnings or returns on investment are considered forms of income and they are usually taxable.

Investment in tangible and certain intangible property are reflected in the nation’s estimates of gross domestic product (GDP); they include private and public creation of nonresidential and residential structures, equipment and software, and inventories. Historical measures of investment help national accountants compile estimates of the nation’s capital stock (available investment goods) and to assess the future productive potential of the economy. Efforts are now underway to incorporate estimates of certain intangible investments, such as research and development, into measures of GDP.

Given information about the acquisition and use of investments and the earnings incurred through the use of these investments, it is possible to estimate the rate-of-return on investments; particularly those that are used by firms that operate in the market place. (It is more difficult to estimate the rate of return of certain public sector investments.) These rates of return assist prospective investors in determining whether it is in their best interest to invest in particular types of assets—if they decide to invest at all. The basis for making most investment decision is the extent to which the future stream of income derived from the investment, in present discounted value terms, exceeds today’s cost of the investment.³

³ By “present discounted value” (PDV) is meant the sum of “t” period expected returns on the investment discounted (divided by the quantity $((1+r)^t)$) back to the current period. For example, if the flow of investment returns summed to 100 over a five year period, and the discount rate (interest rate, r) is selected to be 5 percent, then the PDV is calculated as $(\$100/(1+0.05)^5)$, which equals \$78.35. In this

According to the U.S. Federal Reserve Board estimates for the 2004 *Consumer Finance Survey*, the average (median) Black household owned \$2,280 in financial assets and \$29,900 in nonfinancial assets. The average for all households in the nation was \$18,300 in financial assets and \$131,600 in nonfinancial assets. The average White American household owned \$33,000 in financial assets and \$155,800 in nonfinancial assets.

case, a rational investor would not have entered into this investment if the cost of the investment exceeds \$78.35.

How does the Stock Market Work?

Let us begin this entry with a broad overarching question that assumes we all know that the stock market is a place where investors buy and sell stocks. Specifically, we should begin with the question: “Should we transact in the stock market?” Answer: “It depends on one’s appetite for risk.” Because, as will be discussed below, the stock market represents a set of risky assets that may increase or decrease in value, stock market investors should invest in a manner that is consistent with their willingness/capacity to accept/bear the risk of winning or losing assets.

Now let us go back and begin to dissect this “stock market” idea. As the name implies, the stock market is a market; a place where buyers and sellers meet. What is being bought and sold? Stocks. Stocks or equities, as they are often called, represent portions of the value—value in shares (proportions)—of firms.

Who is selling these shares? Initially (during “initial public offerings” (IPOs) and often later with subsequent offerings), firms offer ownership shares of their company so that they can raise money capital (as distinguished from physical capital (structures and equipment)) to help finance and grow their company. In other words, purchasers of shares become owners of the firm. After firms sell their shares in the stock market to original purchasers, subsequent sales of those shares occur in the stock market by whoever happens to have been fortunate or unfortunate enough to come into ownership of those shares.

Who buys shares in the stock market? Everyone from individual investors like you and me to large investors, and everything in between. Yes, individuals purchase firms’ shares. This option opened up and became more common during the dot.com era in the mid-to-late 1990s when information technology and the proliferation of stock trading companies made it possible for individuals to trade on the stock market. Yes, large investors also purchase company stocks.

An important point to keep in mind is that almost all selling and purchasing of stock in a stock market is handled by stock brokers—much the same way that most real estate transactions are handled by real estate brokers. These middle men and women normally charge a fee for handling transactions—normally on a per share basis. That is, sellers and buyers of stock usually must pay a fee to conduct the transaction in the stock market. For small, individual investors, these fees, even when small, can be quite taxing on a per share basis. Because large investors usually conduct large volume transactions, they often receive discounts or special transaction rates, so that the cost to trade in the stock market is relatively cheap.

How do investors decide on purchasing and selling shares? It depends. Investors invest for a range of reasons: To receive periodic dividends based on the profits that the firm earns; for short-term “capital” gain; for long-term growth; and for all reasons in between. Depending on the firm’s performance, stock holders may or may not earn periodic dividends; this is just one aspect of the risk associated with owning stocks. The

other aspect of the risk of stock ownership concerns what happens to the price or value of the stock during ownership; does it rise or fall? Obviously, no one wants to lose money (the value of the stock decreases), so the objective is to earn money in the stock market (the value of the stock increases)—or at a minimum to break even (the value of the stock is unchanged)—after taking into account the trading commission that must be paid to stock brokers.

If an investor is looking for a short-term gain, then that investor may be looking for stocks that appear to be under-valued (under-priced) at the moment when they can be purchased; there would be the related expectation that the value (price) of the stocks will increase in the short-term at which time they can be sold.

On the other hand, investors may be looking for long-term growth. Such investors are not so concerned about purchasing stocks at a low price (though they wouldn't turn away from this opportunity) because they plan to hold the stock for an extended period before selling the stock. The history of the stock market is that, in spite of its ups and downs, measures of stock prices and values have trended upward. These investors count on the fact that the value of the stock will increase during their holding period.

Depending on the number and type (voting versus nonvoting) of shares that an investor purchases, the investor may obtain a right to vote on management issues in the related firm. If investors (or coordinated groups of investors) purchase over 50 percent of a firm's voting shares, then they will have acquired a "controlling interest" in the firm (a majority position).

What are the tools used to determine whether to buy or sell stock? There are many tools for making stock-selling and stock-purchasing decisions. Many traders make these decisions using tools that they have developed themselves or that they have learned from other traders. However, a few popular measures that are in use include: Historical statistics on price-to-earnings ratios (P/E ratios), on earnings per share, and on Tobin's Q.

Historical price-per-share to earnings-per share ratios can give investors insights on the relative price of a stock at a particular point in time. Depending on the cycle, a low ratio may signal an appropriate time to buy, while a high ratio may signal a time to sell. Historical data on earnings per share may reflect an upward or downward trend, which may indicate to investors prospective future earnings for the shares—depending on the industry involved and the business cycle. Finally, Tobin's-Q is a ratio of a firm's market capitalization or market value to its asset or book accounting value, and signals whether a firm is over- or under-capitalized in the market place. When Tobin's Q is less than one, it indicates that the market value of the firm is less than the book value of the assets owned by the firm, which signals under capitalization; i.e., the possibility of further market capitalization or a rise in the stock price. Such a situation may mean that the stock is a "good" value and may prompt investors to purchase it. Of course, a Tobin's Q greater than one implies the reverse set of interpretations.

There are two main stock markets in the United States: The New York Stock Exchange (NYSE) and the NASDAQ (National Association of Securities Dealers Automated Quotation). Most developed nations of the world have their own stock markets. The evolution of information technology has made it possible for all of the world's stock markets to be inter-linked in some way, so that activity on one stock exchange is likely to have some repercussions on other stock exchanges.

What are key measures for U.S. stock markets? Four often cited measures include: the NYSE Composite Index, which represents the relative (relative to a base period) market value of all stocks being traded on the exchange; the NASDAQ Composite Index, which represents the relative market value of all stocks being traded on the exchange; the Dow Jones Industrials (DJI) Average Index, which represents the relative value of the stocks of 30 large "industrial" firms; and the Standard & Poors (S&P) 500 Index, which represents the value of the largest 500 firms on the NYSE in terms of capitalization.

Key points to always remember about the stock market:

- The market reflects a random process. It is "impossible" to predict completely the direction and magnitude of changes in the stock market without error for an extended period.
- The conventional wisdom is that no investor can "beat" the market perpetually. That is, it is believed that no investor can invest in such a way that the earnings that they achieve exceed those of the aforementioned broad market indexes over the long haul. Consequently, there is a continuous cycle of market prognosticators and investors who come in, and go out of, favor as they beat and fall behind broad market measures over time.
- The conventional wisdom is also that, to achieve optimal returns, it is critical that investors diversify; i.e., spread their investments across a range of assets according to risks. Because the stock market represents a set of risky assets, the recommendation is usually to not invest solely in the stock market.
- The conventional wisdom is that "rational" (informed) investors will win over "irrational" investors (noise traders). That is, those who are trained and experienced at investing in the stock market will out earn those who have no such training or experience. In fact, the expectation is that rational investors will make earnings in the market at the expense of irrational investors (noise traders). "Beginners luck," sheer luck, and periods when there are more noise traders in the market than informed traders may create a situation where rational traders are not the winners for certain periods. However, in the long run, rational traders typically win over irrational traders.

Having said all of that, the stock market has, until now, been a source of earnings for those who use available stock market trading tools and knowledge wisely to make investment decisions. In most cases, however, individual investors turn to the experts to do their investing for them.

According to estimates from the 2004 Federal Reserve Board *Survey of Consumer Finances*, the average (median) Black American household owned \$967 in directly held stocks; the average household in the nation owned \$33,013 in directly held stocks; and the average White household owned \$43,773 in directly held stocks.

What are Bonds?

Bonds are financial instruments that are sold by government (federal, state, or local governments) or by firms (also known as commercial paper) to investors. Bonds represent loans by investors to government or business. Unlike equities (company stocks), bonds inure no ownership rights to lenders. However, bonds are considered to be less risky than equities. Current laws require that lenders be paid before dividends are extended to stock holders should a firm enter a dissolution process.

How do bonds work? If an investor, say Investor I, decides to invest in a firm by purchasing the firm's bonds, then the investor makes a decision to act as a lender to the firm based on specific terms: A predetermined interest rate (rate of return) and a predetermined loan period. For example, an investor may act as a lender to a firm by giving the firm \$1,000 and receiving in exchange a bond certificate with a face value of \$1,000. The terms of the loan, for sake of this example, might be that the interest rate is 5 percent per annum and the period of the loan is five years. In this case, the firm pledges to pay the lender \$50 dollars in interest each year during the loan period ($\$1,000 \times 0.05 = \50); and at the end of the five-year period, the firm would return the investor's \$1,000. In this case, the investor will receive a total of \$250 in total interest payments for this bond over the five-year period.

Bonds are similar to equities in that they are both financial instruments that can be traded. In other words, an investor who purchases a bond can sell it in the bond market to another willing investor before the loan or maturity period ends. However, depending on circumstances, the seller may or may not be able to obtain the face value of the bond held (the amount of the original loan) at the point of sale. This is one risk of investing in bonds.

A second risk that is associated with bonds is that a bond issuing company may have difficulty during the loan period and may go into default. In this case, interest payments will likely stop, and there is no guarantee that the face value of the bond (in this case \$1,000) will be returned.

Why would an investor be unable to obtain the face value of a bond when it is sold? One explanation may be that the interest rate may have increased. If you were an investor, which investment opportunity would you prefer? To be Investor II and make a five-year loan for \$1,000 by purchasing a bond with a face value of \$1,000 and a 10-percent interest rate (total interest receipts of \$500 over the bond maturity period); or to be Investor III and make a four-year loan for \$1,000 by purchasing a bond with a face value of \$1,000 and a five-percent interest rate (total interest receipts of \$200 over the bond maturity period). Ignoring time preferences, most investors would prefer to be Investor II. Why? Although both loans are for \$1,000 in exchange for a bond with a face value of \$1,000, in the first case, the interest rate is 10 percent, while in the second case the interest rate is 5 percent. The difference in total expected interest receipts for Investor II is \$500 versus \$200 for Investor III.

Actually, Investor III could be viewed as facing a decision to acquire the bond purchased by Investor I after the latter held it for one year. Now let's assume that the interest rate on bonds similar to those purchased by Investor I increased from 5 percent to 10 percent during the one year that Investor I held the bond. Also, let's assume that Investor I now seeks to sell the bond. Is it logical that Investor III would purchase the bond from Investor I? No because interest rates have risen. Investor III can now purchase bonds that reflect a 10 percent interest rate.

What must Investor I do to sell the bond? Investor I can lower the asking price for the bond to compensate Investor III for the fact that the one-year-old bond is linked to an old five percent interest rate. Note that, given a specific face value, a lower bond price is associated with a higher interest rate. Logically, if Investor I reduces the selling price of the bond from \$1,000 to \$800, then it is likely, all else being equal, that Investor III would decide to purchase the bond. Why? Let's do the math. Applying the 10 percent rate to a \$1,000 face value bond with a four-year maturity yields a total return of \$400. However, Investor I's bond will only yield five percent interest over the four year maturity period or \$200. Given that Investor III can only expect \$200 in interest payments from Investor I's bond, but could expect \$400 in interest payments on a new bond at the new 10 percent interest rate, Investor III will only purchase Investor I's bond if the total return on the latter's bond is raised to \$400. This can be accomplished if Investor I sells the bond to Investor III for \$800 and Investor III receives \$200 in interest payments for the bond and is returned the full \$1,000 face value of the bond when it matures. That Investor III receives total payments amounting to \$1,200 on an \$800 investment or \$400 in total returns.

Depending on economic conditions and the stability of firms that seek to borrow funds, bonds may represent a relative safe investment. Investing in government bonds is considered to be one of the safest investments. Because of this lower level of risk, government bonds usually pay lower returns (reflect lower interest rates).

Unfortunately, research reveals that there is no high-quality source of information on Black American household's ownership of bonds.

What are Taxes?

Taxes are revenues that are unrequited payments that governments collect from their citizens; i.e., the tax payers have no expectation of receiving immediately and directly any good or service in direct exchange for their payments. Usually, taxes are based on laws that are passed by government officials to raise revenue to meet general and specific needs of its citizens. However, it is often the case that certain taxpayers receive few, if any, government services in exchange for their taxes, while other citizens may receive much more in services from their government relative to the taxes paid.

There are a variety of taxes: Income, corporate profit, excise or sales, property, and custom duties, etc. Taxes should be clearly distinguished from funds that are collected by government in the form of license and other fees and fines (nontaxes).

Traditionally, governments collect taxes to provide for the defense of its populace, as well as to ensure that its citizens have access to education, health care, sufficient transportation options, and appropriate regulations. Government is also generally expected to take necessary action to ensure that there are sufficient economic opportunities.

Increasingly, government is called upon to use its revenue (from whatever source) to assist with providing social security: e.g., income and health benefits to the indigent and to the elderly. This now extends to assuming the liability for pension and health care funds that were defaulted on by firms that establish them.

While governments (federal, state, and local) generally have progressive-type (tax payers with greater capacity to pay, in fact, pay more) tax systems, it is important to assess the full tax burden that citizens bear. That is, it is necessary to not only measure income-type taxes, but also sales, property, and other types of taxes that citizens pay. Although tax analysts note that many Europeans pay value added taxes (taxes paid based on the value of the goods and services consumed) and at a high rate, a full analysis of the total taxes paid may show that many U.S. citizens pay more in taxes than they otherwise would in a European value added taxation system.

For those seeking to belittle the contribution of Black Americans to U.S. government operations, a key point is a comparison of the value of total taxes paid by Black Americans versus the value of government services received by them. Recent studies on certain aspects of this topic (particularly Blacks' payments to and benefits received from retirement programs) discredit this argument and show that Black Americans contribute far more in taxes than they receive in benefits from certain federal government programs.

The Importance of Population

Measuring the population involves counting the number of entities that occupy a particular space. Human population measures apply to nations, states (provinces), regions, cities (municipalities), and neighborhoods (Census tracts). Usually, nations measure their population on an ongoing basis, but will benchmark (or set the population level) the population with full (or nearly full) counts of the population every ten years or so. In the United States, the population is measured via a census every ten years; a requirement that is established in the U.S. Constitution.

The Census Bureau of the U.S. Department of Commerce is tasked with preparing the population census and with preparing regular estimates of the population for years between censuses.

Population measures are valuable for a variety of reasons:

- For preparing economic measures such as: Gross domestic product per capita (i.e., per person); income per capita; etc.
- For measuring sustainability. That is, given average consumption or use of certain resources in a particular area, and given measures of the amount of resources available in the area, it is possible to determine sustainability by determining how many persons occupy an area.
- For estimating growth. Measuring population over time enables statisticians to estimate how population growth will proceed in the future. Because population growth is closely associated with economic growth, knowledge of prospective population growth will provide good insights into prospective economic growth.
- For determining which groups in the nation are growing or declining (proportionately).
- For planning the future.

There are many other reasons for preparing population estimates.

As of 2006, the Black American population was estimated by the Census Bureau at 40.2 million, and constituted about 13.4 percent of the U.S. population.

What is Unemployment?

As a starting point for defining unemployment, it is appropriate to begin by defining employment. Generally, to be employed is to be engaged in an activity. In an economic sense, to be employed is to be “working”; i.e., to have a job for which one receives compensation. (Such compensation is usually on a “per period” (hourly, weekly, monthly, or annual basis) or “per task” basis.) The compensation may include “regular” pay (for up to 40 hours per week), overtime pay (for work beyond the 40 hour week), and bonus pay (special pay that may represent compensation for an extraordinary effort or it may be standardized (i.e., a regular component of the compensation package)).

Now that we know what it means to be employed, we can turn to what it means to be unemployed. Simply put, to be unemployed is to be without a job; to not have work to do.

In the United States, the measurement of unemployment and the unemployed is performed thusly:

- Households are contacted and queried concerning persons who are working and who are not working.
- For those who are not working, the questioning proceeds with the query, “Has the nonworking person actively sought work (filed job applications, sent our resumes, attended job interviews, etc.) within the past four weeks.” “Actively seeking” work primarily means, has one participated in a job interview?
- If it can be determined that a person has actively engaged in seeking employment in the past four weeks, then that person is considered to be a member of the labor force. If a person has not actively sought work within the past four weeks, then that person is not in the labor force.
- The unemployed, then, are those who are in the labor force, but who are not working.

Therefore, the unemployment rate (UR) is calculated using the following equation:

$$\text{UR} = \text{Unemployed Persons} / \text{Total Labor Force}$$

Notably, a person who is not working, who has not been working for some time, and who has not actively sought work within the past two weeks, but who would work if given the opportunity to do so, is considered a “discouraged worker.” Discouraged workers are not counted among the unemployed and are not reflected in the unemployment rate.

Given the foregoing, it is believed that large numbers of Black Americans fall into the category of discouraged workers, are not considered unemployed, and are not reflected in the official unemployment rate.

As of July 2007, the overall Black unemployment rate was 8.9 percent; the White unemployment rate was 4.3 percent. About 65.1 percent of working age (16 years of age and above) Blacks were labor force participants. For Black males over 20 years of age, the unemployment rate was 7.7 percent, while the Black female unemployment rate was 7.6 percent for those 20 years of age or over. The unemployment rate was 30.5 percent for Black males and females between the ages of 16-19.

What are NAICS and NAPCS?

NAICS

NAICS is an acronym that stands for “North American Industry Classification System.” The system was first adopted in the late 1990s, and one can first find certain statistics on a NAICS basis beginning with 1997. NAICS was updated slightly thereafter and re-released as NAICS 2002. A new 2007 NAICS is now available. NAICS replaced the “Standard Industrial Classification System” (SIC) which was enforce for decades.

NAICS is simply a classification system. It is an effort to classify systematically all goods and services that are produced in the economy on an industry-by-industry basis. Theoretically, the only industries that it does not classify are those that did not yet exist at the time the system was developed. New industries that form after the most recent NAICS version are incorporated during the subsequent NAICS revision.

Industries constitute a grouping based on the process (production function) used to produce goods or services. That is, goods and services that are produced using similar methods are grouped in the same industry.

This classification system is for North America (Canada, Mexico, and the United States). It grew out of the formation of the North American Free Trade Association (NAFTA), which evolved in the late 1980s and early 1990s.

It is important to have a classification system when considering economic issues, because it is essential to have the wherewithal to classify and measure economic activities systematically and to consider interactions between various groupings (industries) within the economy. For example, it may be important to know how many computers and how much software are needed to produce all of the transportation equipment that is produced during a specific period. On the other hand, it may be important to know how much food is consumed by children in elementary schools. An industry classification system makes it possible to measure these phenomena. In fact, the nation’s Input-Output (I-O) accounts make it possible to answer such questions, and the I-O accounts are prepared on a NAICS basis.

NAPCS

The North American Product Classification System (NAPCS) is a counterpart to NAICS. The effort to develop a product classification system began in 1999, and sought to catalogue all products from a demand, non-industry specific perspective. As of 2007, products mainly associated with services industries that appear in NAICS (Industries 48-49 through 81) had been classified. The NAPCS, in conjunction with NAICS, will facilitate the development of improved measures of economic activity in the United States, Mexico, and Canada—the three nations that collaborated to develop the system.

What is the Rule of 72?

The “Rule of 72” is a mathematical algorithm that helps one determine how long it will take resources (usually monetary resources) to double if those resources are producing some specified rate of return (yielding some interest rate).

The rule operates in the following way:

- Determine the rate of return (interest rate).
- Ensure that the rate of return is expressed as a whole number.
- Divide the number “72” by the whole number rate of return.

For example, if one has invested \$1,000 at a rate of return of 5.0 percent, then one would divide 72 by 5 and arrive at the quotient 14.4. Thus we determine that, at a 5.0 percent rate of return, it will take 14.4 years for the \$1,000 investment to double or to become \$2,000. This calculation takes into account the concept of continuous compounding of the returns—i.e., the rate of return is not only paid on the initial investment, but is paid on the initial investment plus any accumulated returns.

The rate of return is revealing from two perspectives. First, it tells us that we should seek the highest possible rates of returns—given our appetite for risk. For example, if, in the above scenario, one had invested the \$1,000 at a 10.0 percent rate of return, then the time to double the investment would be reduced to 7.2 years.

Second, the rule tells us that, given our investment and rate of return, we should allow as much time as possible for the investment to grow. The old saying is that one is in much better shape, investment wise, if one begins investing during their 20s as opposed to waiting until one’s 50s.

To state the obvious, one can realize larger returns to the extent that one invests early and is able to secure higher rates of return.

What are the Top 25 Paying Professions in the U.S.?

Given that Americans continue to spend more on health care each year, it is no surprise that increasing demand for healthcare services is pushing up the value of compensation in the healthcare industries. Consequently, we find that healthcare related professions occupy the top 5 of the top 25 paying professions.

Forbes.Com (2006): Professions' mean annual salaries

1. Surgeon \$181,850
2. Anesthesiologist \$174,610
3. Obstetricians/Gynecologists \$174,490
4. Oral and Maxillofacial Surgeons \$169,600
5. Internist, general \$156,790
6. Prosthodontists \$156,710
7. Orthodontists \$153,240
8. Psychiatrists \$151,380
9. Chief Executives \$140,880
10. Pediatricians \$140,000
11. Family and general practitioners \$137,980
12. All other physicians and surgeons \$137,100
13. Airline pilots, co-pilots, and engineers \$134,090
14. Dentists \$132,660
15. Podiatrists \$111,130
16. Lawyers \$110,590
17. Engineer Managers \$104,210
18. Air Traffic Controllers \$100,430
19. Computer and Information System Managers \$100,110
20. Marketing Managers \$100,020
21. Natural Sciences Managers \$97,560
22. Sales Manager \$96,950
23. Astronomers \$96,780
24. Optometrists \$96,290
25. Law Teachers, Post Secondary \$95,570

Sources: http://www.forbes.com/2006/05/20/best-paying-jobs_cx_pm_06work_0523jobs.html; retrieved from the Internet on September 2, 2007.

What are the Lowest 25 Paying Professions in the U.S.?

Similar to the “Diamond-Water Paradox,” it is quite interesting that the value of compensation is so low for those who perform such a vital service; i.e., those who prepare and serve food. Food related occupations occupy the bottom five of the 25 lowest paying professions.

Forbes.Com (2006): Professions’ mean annual salaries

1. Laundry and Dry-Cleaning Worker \$18,290
2. Nonrestaurant Food Servers \$18,120
3. Graders and Sorters, Agricultural Products \$18,080
4. Child Care Workers \$18,060
5. Maids and Housekeeping Cleaners \$18,030
6. Pressers, Textile, and Garment and Related Materials \$17,980
7. Short Order Cooks \$17,870
8. Food Preparation Workers \$17,850
9. Life Guard, Ski Patrols, and Other Recreational Protective Services Workers \$17,820
10. Parking Lot Attendants \$17,730
11. Person and Home Care Aids \$17,560
12. Bartenders \$17,360
13. Cashiers \$17,200
14. Farm Workers and Laborers, Crop, Nursery, Green Houses \$17,110
15. Usher, Lobby Attendants, and Ticket Takers \$16,770
16. Amusement, Recreation Attendants \$16,730
17. Hostess and Hostesses in Restaurants, Lounges, and Coffee Shops \$16,310
18. Counter Attendants in Cafeterias and Coffee Shops \$16,290
19. Game Dealers \$16,210
20. Shampooers \$16,020
21. Waiters and Waitresses \$15,980
22. Dishwashers \$15,670
23. Dining Room and Cafeteria Attendants and Bartenders \$15,560
24. Food Preparation and Serving Workers \$15,430
25. Fast Food Cooks \$15,230

Source: http://www.forbes.com/2006/05/20/best-paying-jobs_cx_pm_06work_0523jobs.html; retrieved from the Internet on September 2, 2007.