CHAPTER 5

Economic Fundamentals

INTRODUCTION

Economics, put simply, is the study of shortages—supply vs. demand. As the demand for a product or service rises, the price of those goods or services will tend to rise. Alternatively, if the provider of those goods or services tries to flood the market with those goods or services, the price will tend to decline as the supply outpaces the demand. The supply and demand model works for all goods and services including stocks, bonds, real estate, and money.

GROSS DOMESTIC PRODUCT

A country's Gross Domestic Product or GDP measures the overall health of a nation's economy. The Gross Domestic Product is defined as the value of all goods and services produced in a country including consumption, investments, government spending, and exports minus imports during a given year.

Economists chart the health of the economy by measuring the country's GDP and by monitoring supply and demand models, along with the nation's business cycle. A country's economy is always in flux. Periods of increasing output are always followed by periods of falling output. The business cycle has four distinct stages:

1. Expansion
2. Peak

3. Contraction
4. Trough

EXPANSION

An economy, during an expansionary phase, will see an increase in overall business activity and output. Corporate sales, manufacturing output, wages and savings will all increase while the economy is expanding or growing. An economy cannot continue to grow indefinitely and GDP will top out at the peak in the business cycle. An economic expansion is characterized by:

- Increasing GDP
- Rising consumer demand
- Rising stock market
- Rising production
- Rising real estate prices

PEAK

As the economy tops out, the GDP reaches its maximum output for this cycle as wages, manufacturing, and savings all peak.

CONTRACTION

During a contraction, GDP falls along with productivity, wages, and savings. Unemployment begins to rise, the stock market begins to fall, and corporate profits decline as inventories rise.

TROUGH

The economy bottoms out in the trough as GDP hits its lowest level for the cycle. As GDP bottoms out, unemployment reaches its highest level, wages

bottom out, and savings bottom out. The economy is now poised to enter a new expansionary phase and start the cycle all over again.

RECESSION

A recession is defined as a period of declining GDP, which lasts at least six months or two quarters. Recessions may vary in degree of severity and in duration. Extended recessions may last up to 18 months and may be accompanied by steep down turns in economic out put. In the most severe recessions falling prices erode businesses' pricing power, margins and profits as deflation takes hold. Recessions are generally triggered by an overall decrease in spending by businesses and consumers. As businesses and consumers pull back spending overall demand falls. Businesses and consumers will often reduce spending as a cautionary measure in response to an economic event or shock such as a financial crises or the busting of a bubble in an inflated asset class such as real estate or the stock market.

DEPRESSION

A depression is characterized by a decline in GDP that lasts at least 18 months or six consecutive quarters. GDP often falls by 10 percent or more during a depression. A depression is the most severe type of recession and is accompanied by extremely high levels of unemployment and frozen credit markets. The steep fall in demand is more likely to lead to deflation during a depression.

ECONOMIC INDICATORS

There are various economic activities that one can look at to try to identify where the economy is in the business cycle. An individual can also use these economic indicators as a way to try and predict the direction of the economy in the future. The three types of economic indicators are:

- Leading indicators
- Coincident indicators
- Lagging indicators

LEADING INDICATORS

Leading indicators are business conditions that change prior to a change in the overall economy. These indicators can be used as a gauge for the future direction of the economy. Leading indicators include:

- Building permits
- Stock market prices
- Money supply (M2)
- New orders for consumer goods
- Average weekly initial claims in unemployment
- Changes in raw material prices
- Changes in consumer or business borrowing
- Average work week for manufacturing
- Changes in inventories of durable goods

COINCIDENT INDICATORS

Changes in the economy cause an immediate change in the activity level of coincident indicators. As the business cycle changes, the level of activity in coincident indicators can confirm where the economy is. Coincident indicators include:

- GDP
- Industrial production
- Personal income
- Employment
- Average number of hours worked
- Manufacturing and trade sales
- Nonagricultural employment

LAGGING INDICATORS

Lagging indicators will only change after the state of the economy has changed direction. Lagging indicators can be used to confirm the new direction of the economy. Lagging indicators include:

- Average duration of unemployment
- Corporate profits

- Labor costs
- Consumer debt levels
- Commercial and industrial loans
- Business loans

ECONOMIC POLICY

The government has two tools that it can use to try to influence the direction of the economy. Monetary policy, which is controlled by the Federal Reserve Board, determines the nation's money supply, while fiscal policy is controlled by the President and Congress and determines government spending and taxation.

TOOLS OF THE FEDERAL RESERVE BOARD

The Federal Reserve Board will try to steer the economy through the business cycle by adjusting the level of money supply and interest rates. The Fed may:

- Change the reserve requirement for member banks
- Change the discount rate charged to member banks
- Set target rates for federal fund loans
- Buy and sell U.S. government securities through open market operations
- Change the amount of money in circulation
- Use moral suasion

RESERVE REQUIREMENT

Member banks must keep a percentage of their depositor's assets in an account with the Federal Reserve. This is known as the reserve requirement. The reserve requirement is intended to ensure that all banks maintain a certain level of liquidity. Banks are in business to earn a profit by lending money. As the bank accepts accounts from depositors, it pays them interest on their money. The bank, in turn, takes the depositors' money and loans it out at higher rates, earning the difference. If the Fed wanted to stimulate the economy, it might reduce the reserve requirement for the banks, which would allow the banks to lend more. By making more money available to borrowers interest rates will fall and demand will increase, helping to stimulate the

economy. If the Fed wanted to slow down the economy it might increase the reserve requirement. The increased requirement would make less money available to borrowers. Interest rates would rise as a result and the demand for goods and services would slow down. Changing the reserve requirement is the least-used Fed tool.

CHANGING THE DISCOUNT RATE

The Federal Reserve Board may change the discount rate in an effort to guide the economy through the business cycle. Remember, the discount rate is the rate that the Fed charges member banks on loans. This rate is highly symbolic, but as the Fed changes the discount rate, all other interest rates change with it. If the Fed wanted to stimulate the economy, it would reduce the discount rate. As the discount rate falls, all other interest rates fall with it, making the cost of money lower. The lower interest rate should encourage borrowing and demand to help stimulate the economy. If the Fed wanted to slow the economy down, it would increase the discount rate. As the discount rate increases, all other rates go up with it, raising the cost of borrowing. As the cost of borrowing increases, demand and the economy slow down.

FEDERAL OPEN MARKET COMMITTEE

The Federal Open Market Committee (FOMC) is the Fed's most flexible tool. The FOMC will buy and sell U.S. government securities in the secondary market in order to control the money supply. If the Fed wants to stimulate the economy and reduce rates, it will buy government securities. When the Fed buys the securities, money is instantly sent into the banking system. As the money flows into the banks, more money is available to lend. Because there is more money available, interest rates will go down and borrowing and demand should increase to stimulate the economy. If the Fed wants to slow the economy down, it will sell U.S. government securities. When the Fed sells the securities, money flows from the banks and into the Fed, thus reducing the money supply. Since there is less money available to be loaned out, interest rates will increase, slowing borrowing and demand. This will have a cooling effect on the economy.

MONEY SUPPLY

Prior to determining an appropriate economic policy, economists must have an idea of the amount of money that is in circulation, along with the amount

of other types of assets that will provide access to cash. Economists gauge the money supply using three measures. They are:

- M1
- M2
- M3

M1

M1 is the largest and most liquid measure of the nation's money supply and it includes:

- Cash
- Demand deposits (checking accounts)

M2

Includes all of the measures in M1 plus:

- Money market instruments
- Time deposits of less than $100,000
- Negotiable CDs exceeding $100,000
- Overnight repurchase agreements

M3

Includes all of the measures in M1 and M2 plus

- Time deposits greater than $100,000
- Repurchase agreements with maturities greater than one day

DISINTERMEDIATION

Disintermediation occurs when people take their money out of low-yielding accounts offered by financial intermediaries or banks and invest money in higher-yielding investments.

MORAL SUASION

The Federal Reserve Board will often use moral suasion as a way to influence the economy. The Fed is very powerful and very closely watched. By simply

implying or expressing their views on the economy they can slightly influence the economy.

Monetarists believe that a well-managed money supply, with an increasing bias, will produce price stability and will promote the overall economic health of the economy. Milton Friedman is believed to be the founder of the monetarist movement.

FISCAL POLICY

Fiscal policy is controlled by the President and Congress and determines how they manage the budget and government expenditures to help steer the economy through the business cycle. Fiscal policy may change the levels of:

- Federal spending
- Federal taxation
- Creation or use of federal budget deficits or surpluses

Fiscal policy assumes that the government can influence the economy by adjusting its level of spending and taxation. If the government wanted to stimulate the economy, it may increase spending. The assumption here is that as the government spends more, it will increase aggregate demand and, therefore, productivity. Additionally, if the government wanted to stimulate the economy, it may reduce the level of taxation. As the government reduces taxes, it leaves a larger portion of earnings for the consumers and businesses to spend. This should also have a positive impact on aggregate demand. Alternatively, if the government wanted to slow down the economy, it may reduce spending to lower the level of aggregate demand or raise taxes to reduce demand by taking money out of the hands of the consumers. John Maynard Keynes believed that it was the duty of the government to be involved with controlling the direction of the economy and the nation's overall economic health.

As both the Federal Reserve Board and the government monitor the overall health of the U.S. economy, they look at various indicators some of which are:

- Consumer Price Index
- Inflation/Deflation
- Real GDP

THE CONSUMER PRICE INDEX (CPI)

The consumer price index is made up of a basket of goods and services which consumers most often use in their daily lives. The consumer price index is used to measure the rate of change in overall prices. A CPI that is rising would indicate that prices are going up and that inflation is present. A falling CPI would indicate that prices are falling and deflation is present.

INFLATION/DEFLATION

Inflation is the persistent increase in prices, while deflation is the persistent decrease in prices. Both economic conditions can harm a county's economy. Inflation will eat away at the purchasing power of the dollar and results in higher prices for goods and services. Deflation will erode corporate profits as weak demand in the market place drives prices for goods and services lower.

REAL GDP

Real GDP is adjusted for the effects of inflation or deflation over time. GDP is measured in constant dollars so that the gain or loss of the dollar's purchasing power will not show up as a change in the overall productivity of the economy.

Both monetary policy and fiscal policy have a major effect on the stock market as a whole.

The following are bullish for the stock market:

- Falling interest rates
- Increasing money supply
- An increase in government spending
- Falling taxes

The following are bearish for the stock market:

- Increasing taxes
- Increasing interest rates
- Falling government spending
- Falling money supply

INTERNATIONAL MONETARY CONSIDERATIONS

The world has become a global marketplace. Each country's economy is affected to some degree by the economies of other countries. Currency values relative to other currencies will impact a country's international trade and the balance of payments. The amount of another country's currency that may be received for a country's domestic currency is known as the exchange rate. The balance of payments measures the net inflow (surplus) or outflow (deficit) of money. The largest component of the balance of payments is the balance of trade. As the exchange rates fluctuate, one country's goods may become more expensive, while another county's goods become less expensive. A weak currency benefits exporters, while a strong currency benefits importers.