SUMMARY/REVISION NOTES

Main Reference: Economics, 19th Edition

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- *Prices in goods markets* are set to *balance consumer demand with business supply* while *prices in factor markets* are set *to balance household supply with business demand*.
- The distribution of income is determined by the ownership of factors of production (land, labor and capital) and by factor prices.

THE INVISIBLE HAND

- Subtle point: private interest can lead to public gain when it takes place in a well-functioning market mechanism.
- Market failures with invisible hand: (i) monopolies and other forms of imperfect competition; (ii) spillovers of externalities outside the marketplace (positive externalities such as scientific discoveries and negative externalities such as pollution); and (iii) income distribution is politically or ethically unacceptable.

TRADE, MONEY AND CAPITAL

Distinguishing Features of a Modern Economy:

- An advanced economy is characterized by an elaborate network of trade that depends on specialization and intricate division of labor.
- Modern economies today make extensive use of money which provides the yardstick for measuring economic values and is the means of payment.
- Modern industrial technologies rest on the use of vast stocks of capital. Capital leverages human labor into a much more efficient factor of production and allows productivity many times greater than that possible in an earlier age.

TRADE, SPECIALIZATION AND DIVISION OF LABOR

- Specialization occurs when people and countries concentrate their efforts on a particular set of tasks – it permits each person and country to use to best advantage the specific skills and resources that are available.

MONEY: THE LUBRICANT OF EXCHANGE

- Money is the means of payment in the form of currency and checks used to buy things. Money is a lubricant that facilitates exchange.
- The control of money supply is under the responsibility of the central banks.

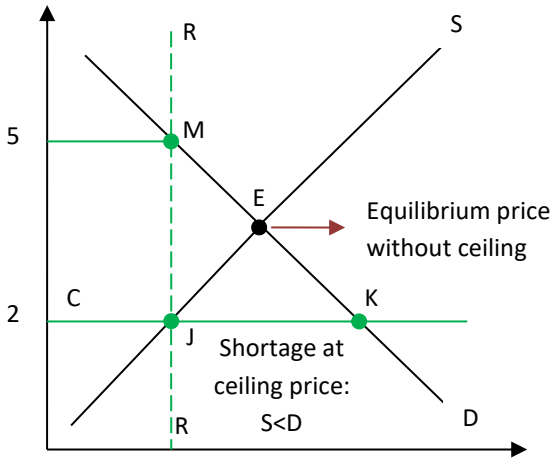
THE VISIBLE HAND OF GOVERNMENT

Three main economic functions of government in a market economy:

- Governments ***increase efficiency*** by promoting competition, curbing externalities like pollution, and providing public goods.
- Governments ***promote equity*** by using tax and expenditure programs to redistribute income toward particular groups.
- Governments ***foster macroeconomic stability and growth*** – reducing unemployment and inflation while encouraging economic growth – through fiscal and monetary policy.

- Effect of price ceiling: Suppose the initial price of gasoline is $2 per gallon. Because of a drastic cut in oil supply, the market price of gasoline rises sharply.
- What will happen if there is price control? The figure below will provide an explanation.

Gasoline Market after Supply Shock



- The post-shock equilibrium is given by at point E. Without a legal price ceiling, price would rise to E. At the ceiling price of $2, supply and demand do not balance and shortages break out.
- Some method of formal or informal rationing is needed to allocate the short supply and bring the actual demand down to supply at RR.
- If C/ration coupons become marketable, this would imply a new supply curve of RR. At the ceiling price of $2, coupons would sell for $3, and the total price (coupons plus cash) would be $5.

Rationing by the Queue, by Coupons, or by the Purse?

- The inadequate supply of gasoline must somehow be rationed. Initially, this may be done through a first-come, first-served basis. When people fall in line, this is rationing by the "queue".
- When rationing is adopted, shortages disappear because demand is limited by the allocation of the coupons.
- When there is room for ample substitution (i.e., when elasticities of demand and supply are high), price controls are costly, ineffective and difficult to administer.

CHAPTER 5: DEMAND AND CONSUMER BEHAVIOR

Marginal Utility and the Law of Diminishing Marginal Utility

- Utility denotes satisfaction. It refers to how consumers rank different goods and services.
- The increment to one's utility is called **marginal utility**. It denotes the additional utility one gets from the consumption of an additional unit of a commodity.
- Law of Diminishing Marginal Utility: States that the amount of extra or marginal utility declines as a person consumes more and more of a good.
- Total utility is the sum of all the marginal utilities that were added from the beginning.

Equimarginal Principle: The fundamental condition of maximum satisfaction or utility is the equimarginal principle. It states that a consumer will achieve maximum satisfaction or utility *when the marginal utility of the last dollar spent on a good is exactly the same as the marginal utility of the last dollar spent on any other good*.

- Marginal Utility of Income measures the additional utility that would be gained if the consumer could enjoy an extra dollar's worth of consumption.

$$\frac{MU_{good\ 1}}{P_1} = \frac{MU_{good\ 2}}{P_2} = \frac{MU_{good\ 3}}{P_3} = \cdots = MU\ per\ \$\ of\ income$$

INDIFFERENCE CURVES: ALTERNATIVE APPROACH TO UNDERSTANDING DOWNWARD-SLOPING DEMAND CURVE

1. Substitution Effect

- When price of a good rises, consumers tend to substitute other goods for the more expensive good in order to satisfy their desires more inexpensively.

2. Income Effect

- When a price rises and money income is fixed, real income falls because the consumer cannot afford to buy the same quantity of goods as before.
- The income effect is the change in the quantity demanded that arises because a price change lowers consumer real incomes.
- Most goods respond positively to higher incomes so the income effect will normally reinforce the substitution effect in producing a downward sloping demand curve.
- Income effect can be measured quantitatively using the *concept of income elasticity*.

$$Income\ Elasticity = \frac{\%\ change\ in\ quantity\ demanded}{\%\ change\ in\ income}$$

FROM INDIVIDUAL TO MARKET DEMAND

- The demand curve for a good for the entire market is obtained by summing up the quantities demanded by all the consumers.

SUBSTITUTES AND COMPLEMENTS

- Goods A and B are **substitutes** if an increase in the price of good A will increase the demand for substitute good B.

SHORTCOMINGS OF THE PERFECT COMPETITIVE MARKET

1. Imperfect competition. Occurs when a certain firm has market power in a particular market (say it has monopoly power).
2. Externalities arise when some of the side effects of production or consumption are not included in market prices.
3. Imperfect information.

Some notes:

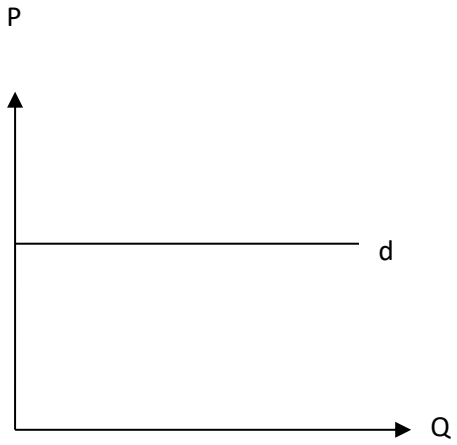
- A society does not live on efficiency alone. A society may choose to alter market outcomes to improve the equity or fairness of the distribution of income and wealth. Nations may levy progressive taxes on those with high incomes and wealth and use the proceeds to finance food, schools and health care for the poor.

CHAPTER 9: IMPERFECT COMPETITION AND MONOPOLY

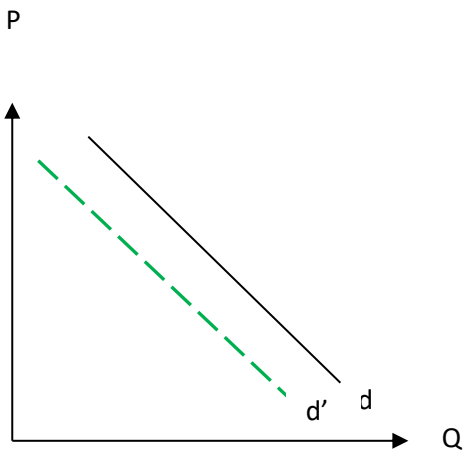
Patterns of Imperfect Competition

- Prices are higher and outputs are lower.
- Firms under imperfect competition have ***some*** control over the price of their output.
- Imperfect competition prevails in an industry whenever individual sellers can affect the price of their output. The major kinds of imperfect competition are monopoly, oligopoly, and monopolistic competition.
- Imperfect competition does not imply that a firm has absolute control over the price of its product.

a.) Firm demand under Perfect Competition



b.) Firm Demand Under Imperfect Competition



- The perfectly competitive firm can sell all it wants along its horizontal curve without depressing the market price.

3. Rivalry among the Few

- Forces firms to take into account competitors' reactions to price and output decisions and brings strategic considerations into their markets.

PRICE DISCRIMINATION

- When firms have market power, they can sometimes increase their profits through price discrimination.
- Occurs when the same product is sold to different consumers for different prices.
- Some examples of price discrimination:
    - Identical textbooks are sold at lower prices in Europe than in the United States. What prevents the wholesalers from purchasing large quantities abroad and undercutting the domestic market? A protectionist import quota prohibits the practice. However, as an individual, you might well reduce the costs of your books by buying them abroad through online bookstores.
    - Airlines are the masters of price discrimination. They segment the market by pricing tickets differently for those who travel in peak or off-peak times, for those who are business or pleasure travellers, and for those who are willing to stand by.
    - Local utilities often use "two-part prices" (a.k.a. nonlinear prices) to recover some of their overhead costs. Telephone or electricity bill generally have *connection price* and *per-unit price of service.* Since connection is much more price-inelastic than per unit prices, utility providers are able to lower per-unit prices to increase the quantity sold.
    - Firms engaged in international trade often find that foreign demand is more elastic than domestic demand. They will therefore sell at lower prices abroad than at home. This practice is called "dumping" and is sometimes banned under international trade agreements.
    - Sometimes a company will actually degrade its top-of-the-line product to make a less capable product which it will then sell at a discounted price to capture a low-price market. For example, IBM inserted special commands to slow down its laser printer from 10pages per minute to 5 pages per minute so that it could sell the slow model at a lower price without cutting into sales of its top model.

Economic effects of price discrimination:

- Price discrimination improves economic welfare. Monopolists raise their price and lower their sales to increase their profits. In doing so, they may capture the market for eager buyers but lose the market for reluctant buyers. By charging different prices for those willing to pay high prices and for those willing to pay lower prices, the monopolist can increase both its profits and consumer satisfactions.

GAME THEORY

- Game theory is a world wherein decisions reach the stage of thinking about what your opponent is thinking, and how you would then react. This is the analysis of situations involving two or more interacting decision makers who have conflicting objectives.

- Findings of game theorists in the area of imperfect competition:

CB raises interest rate target	• The CB may also change the discount rate & the terms of its lending facilities.
CB undertakes OMOs	•CB sells GS=>contracts economy=>reducing reserves and raising short-term interest rate •CB buys GS => expands economy=>increasing the supply of reserves and lowering short-term interest rates
Asset markets react to policy changes	• Higher interest rates reduce asset prices • Higher interest rates raise foreign exchange rates in a flexible exchange rate system
Investment & other spending react to interest rate changes	•High interest rate and tighter credit conditions reduce I, C and NX
MP ultimately affects output and price inflation	• Tighter money and credit conditions leads to a decline in AD and thus, lower output and causes price to rise rapidly

IN SUMMARY… (Sequence from the CB's change in interest rate target to ultimate effect on Q & P)

$$\textbf{\textit{Expansionary MP}}: \ \boldsymbol{r\ decreases} => I, C, X\ up => AD\ up => Q\ and\ P\ up$$

THE CHALLENGE OF A LIQUIDITY TRAP

- When short term interest rates are zero, short-term safe securities are equivalent to money. The demand for money becomes infinitely elastic with respect to the interest rate. In this situation, banks have no reason to economize on their reserve holdings; they get essentially the same interest rates on reserves as on riskless short-term investments.
- If the central bank cannot lower short-term interest rates below zero, what are other steps can it take to stimulate a depressed economy?
    - Lower long-term interest rates: This requires that the CB purchase long-term bonds instead of focusing on short-term securities
    - Reduce the risk premium on risky securities: This includes buying distressed assets, opening the discount window to non-bank financial institutions, buying commercial paper and lending against a wide range of private financial assets.

MONETARY POLICY IN THE LONG-RUN

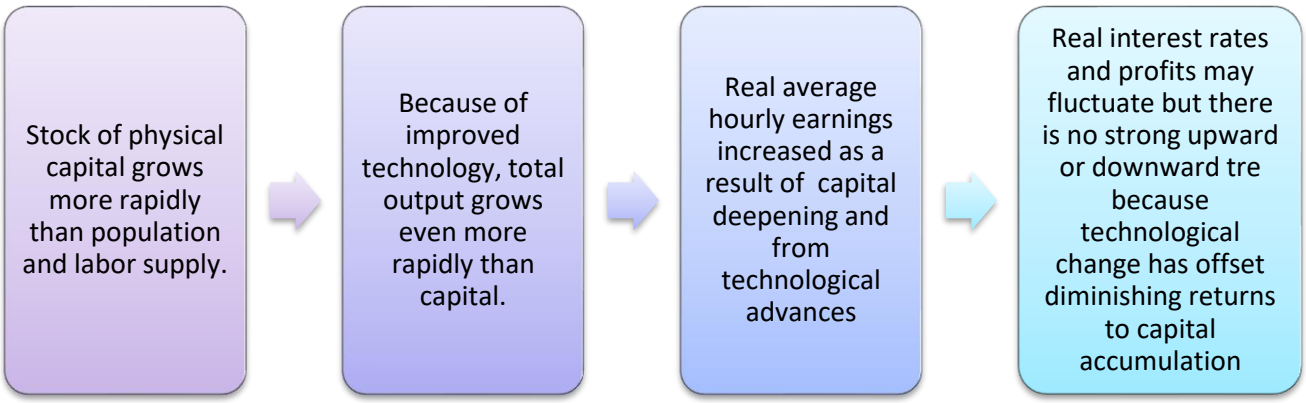
place because each worker has more capital to work with and his MP therefore rises. Hence, the competitive wage rate rises along with the MPL.

- In summary: Capital deepening in the neo-classical growth model occurs when the stock of capital grows more rapidly than the labor force. In the absence of technological change, ***capital deepening will produce a growth of output per worker, of the MPL, and of real wages; it also will lead to diminishing returns on capital and therefore a decline in the rate of capital.***
- Long-run steady state: *In the long-run, the economy will enter a steady state in which capital deepening ceases, real wages stop growing and capital returns and real interest rates are constant. Without technological change, output per worker and the wage rate stagnate. This is certainly a far better outcome than the world of subsistence wages. But the long-run equilibrium of the neo-classical growth model makes it clear that if economic growth consists only of accumulating capital through replicating factories with existing methods of production, then the standard of living will eventually stop rising.*

3. *Technological Change: New Growth Theory or Theory of Endogenous Technological Change*
   - The previous capital-accumulation model cannot explain the tremendous growth in productivity over time nor does it account for the tremendous differences in per capita income among countries. What is missing is technological change.
   - Advances in technology like electronics, internet commerce, improved medical technologies will shift the production function upward. Of particular interest is the impact of changing technologies on rates of profit and real interest rates. As a result of technological progress, the real interest rate need not fall. Invention increases the productivity of capital and offsets the tendency for a falling rate of profit.
   - The new growth theory seeks to uncover the processes by which private market forces, public policy decisions and alternative institutions lead to different patterns of technological change.
   - In summary: Technological change is a crucial ingredient in economic growth of nations. The new growth theory seeks to uncover the processes which generate technological change. This approach emphasizes that technological change is an output that is subject to severe market failures because technology is a public good that is expensive to produce but inexpensive to reproduce. Governments increasingly seek to provide strong intellectual property rights for those who develop new technologies.

THE PATTERNS OF GROWTH

- Understanding the patterns of growth will help sort out the reasons why some nations prosper while others do not.



Chapter 26 – THE CHANLLENGE OF ECONOMIC DEVELOPMENT

POPULATION GROWTH AND DEVELOPMENT

- Malthus: The population, if unchecked, will grow geometrically while food production will only grow arithmetically. Malthus describes the checks that operate to hold population down. He stressed the positive checks that increase the death rate: pestilence, famine, and war. Also population growth could be slowed by "moral restraint" such as abstinence and postponed marriages.
- Population implosion: Most advanced countries face declining population growth rate. It is only because of immigration that those advanced countries' population is growing today.
- Implication: Because of stable or declining population with increasing life expectancy puts great stress on the countries' fiscal conditions because of the need to fund health care and public pensions.

THE FOUR ELEMENTS IN DEVELOPMENT

1. Human resources
   - It's hard for poor countries to overcome poverty with very high birth rates. But there are escape routes from overpopulation. One strategy is to take an active role in curbing population growth like educational campaigns.
   - Human capital: economic planners in developing countries emphasize the following strategies to improve the quality of their human resources:
     - Control disease and improve health and nutrition. Health care clinics and provision of safe drinking water are vitally useful social capital.
     - Improve education, reduce illiteracy and train workers.
     - Do not underestimate the importance of human resources.

2. Natural resources
   - Land ownership patterns are a key to providing farmers with strong incentives to invest in capital and technologies that will increase their land's yield.

- Exports depend primarily upon foreign output as well as upon the prices of exports relative to the prices of foreign goods. As foreign output rises, or as the exchange rate of the currency depreciates, the volume and value of exports tend to grow.
- In summary: exports and imports depend upon exogenous variables such as prices and exchange rates. In addition, imports depend upon domestic output and incomes.
- Policy question: Is a country incurring trade deficit or current account deficit bad? According to US Council of Economic Advisers, current account deficit is neither inherently good nor inherently bad. What matters are the reasons for the deficits. These deficits may reflect higher rate of investment than falling saving.

MARGINAL PROPENSITY TO IMPORT (MPm)

- MPm is the increase in the dollar value of imports for each $1 increase in GDP. The MPm tells how much of additional output and income leaks into imports.

OPEN ECONOMY MULTIPLIER

- $Open\ economy\ multiplier = \frac{1}{MPS+MPm}$
- Because a fraction of any income increases leaks into imports in an open-economy, the open economy multiplier is *smaller* than the multiplier for a closed economy.

MONETARY TRANSMISSION MECHANISM IN AN OPEN ECONOMY

- Will depend on the type of exchange rate regime the country has (i.e., fixed or flexible exchange rate).
- When financial investments can flow easily among countries and the regulatory barriers to financial investments are low, countries have high mobility of financial capital.
- **Fixed exchange rate:** The key feature of countries with fixed exchange rate and high capital mobility is that their interest rates must be very closely aligned. Any divergence in the interest rates between two countries will attract speculators who will sell one currency and buy the other until the interest rates are equalized. If a small country pegs its exchange rate to the currency of a larger country, the small country's interest rates are determined by the monetary policy of large country. Hence, the small country can no longer conduct independent monetary policy. From the small country's point of view, investment is exogenous because it is determined by world interest rates. Fiscal policy is, therefore, highly effective because there is no monetary reaction to changes in government spending or taxes.
- **Flexible exchange rate:** A flexible ER has a reinforcing effect on MP. Suppose the CB decides to reduce interest rates to stimulate the economy. The decline in interest rates would lead to depreciation in the currency as financial investors moved from domestic to foreign assets. The depreciation of the currency will result to a net export surplus. The increase in NX will increase total expenditure and an increase in output. Alternatively, if the CB tightens MP by raising interest rates, it will attract foreign investors (will increase demand for currency), thereby causing the currency to appreciate. Currency appreciation will discourage exports and will eventually lead to a decrease in total output.

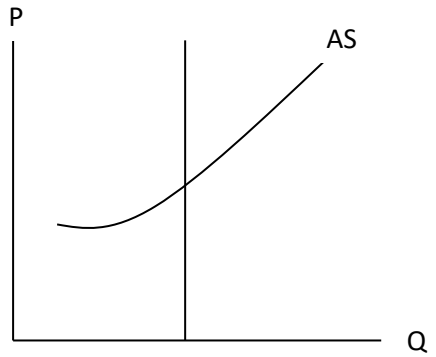
e (exchange rate)

Technology and efficiency	Innovation, technological improvement, and increased efficiency increase the level of potential output and raise AS.
PRODUCTION COSTS	
Wages	Lower wages lead to lower production costs; lower costs mean that quantity supplied will be higher at every price level for a given potential output.
Import prices	A decline in foreign prices or an appreciation in the exchange rate reduces import prices. This leads to lower production costs and raises AS.
Other input costs	Lower oil prices lower production costs and thereby raise AS.

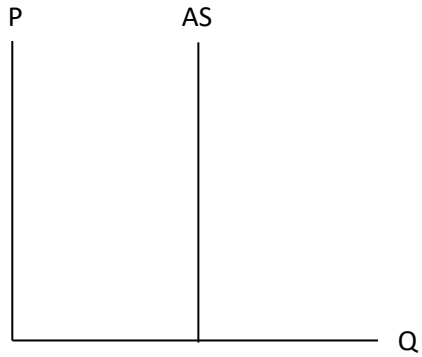
AGGREGATE SUPPLY IN THE SHORT-RUN AND LONG-RUN

- How do shifts in AD affect output and employment?
- The upward sloping SR AS curve is associated with the analysis of ***Keynesian macroeconomics***. If AD falls because of a monetary tightening or a fall-off in consumer spending, this will lead to falling output and prices. So a decline in AD will lead to a decline in both prices and output.
- The long-run approach sometimes called as ***classical macroeconomics*** holds that changes in AD affect prices but have no effect on real output. In the long-run, prices and wages adjust fully to changes in AD. Since the long-run AS curve is vertical, changes in AD have no effect on output.
- The SR AS curve indicates that firms are willing to increase their output levels in response to changes in AD. Clearly, there must be unemployed resources in the economy. But the expansion of output cannot go forever. As output rises, labor shortages appear and factories operate close to capacity. Wages and prices begin to rise more rapidly. A larger fraction of the response to AD increase comes in the form of price increases and a smaller fraction comes in output increases. In the long-run, the level of output supplied is independent of AD.

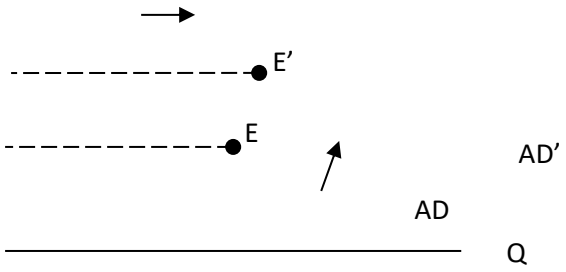
a. SR AS curve



b. LR AS curve



- The SR AS curve slopes upward because many costs are inflexible in the SR which means that both output and prices respond to demand shifts. But sticky prices and wages become

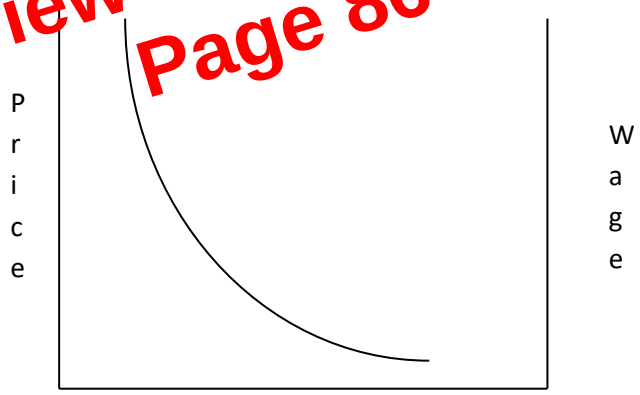


COST-PUSH INFLATION AND STAGFLATION

- Inflation increases because of increases in costs rather than because of increases in demand.
- Oil price shocks will lead to cost push inflation. Equilibrium output falls while prices and inflation rise. This eventually will lead to stagflation. Monetary policy is ineffective in this situation. Monetary expansion will offset the decline in output but will raise prices further. An attempt to curb inflation by tightening MP would only lower output even further.

PHILLIPS CURVE

- Major macroeconomic tool used to understand inflation. This curve shows the relationship between the unemployment rate and inflation.
- The basic idea is that when output is high and unemployment is low, wages and prices tend to rise more rapidly. This occurs because workers and unions can press more strongly for wage increases when jobs are plentiful and firms can more easily raise prices when sales are brisk.



- The relationship between prices, wages and productivity can be formalized as follows. The fact that prices are based on average costs per unit of output implies that price is always proportional to wage rate per output.
- $rate\ of\ inflation = rate\ of\ wage\ growth - rate\ of\ productivity\ growth$
- There is a direct relationship between rate of inflation and rate of wage growth but an inverse relationship with rate of productivity growth.

THE NON-ACCELERATING INFLATION RATE OF UNEMPLOYMENT (NAIRU)

- In the SR, Phillips curve is downward sloping but in the LR it is vertical. This approach implies that in the long-run there is minimum unemployment rate that is consistent with steady inflation.
- NAIRU is that unemployment rate consistent with a constant inflation rate. At the NAIRU, upward and downward forces on price and wage inflation are in balance so there is no tendency for inflation to change. The NAIRU is the lowest unemployment rate that can be sustained without upward pressure on inflation.
- The idea behind the NAIRU is that the state of the economy can be divided into three situations:
    - *Excess demand.* When markets are extremely tight, with low unemployment and high utilization of capacity, then prices and wages will be subject to demand pull inflation.
    - *Excess supply.* In recessionary situations, with high unemployment and idled factories, firms tend to sell at discounts and workers push less aggressively for wage increases. Wage and inflation tend to moderate.
    - *Neutral pressures.* The upward wage pressures from job vacancies just match the downward wage pressures from unemployment. There are no supply shocks from oil or other exogenous sources. Here, the economy is at the NAIRU, and inflation neither rises nor falls.

MODERN THEORY OF INFLATION

- The modern theory of inflation has important implications for economic policy. It implies that there is a minimum level of unemployment that an economy can enjoy in the long-run. If the economy is pushed to very high levels of output and employment, this will ignite an upward spiral of wage and price inflation.
- When the inflation rate is too high, a country can tighten MP, trigger a recession, raise the unemployment rate above the NAIRU and thereby reduce inflation.
- In the SR, inflation can be reduced by raising unemployment above the NAIRU

MAJOR POINTS:

1. In the SR, an increase in AD which lowers unemployment rate below the NAIRU will tend to increase the inflation rate. Recessions and high unemployment tend to lower inflation. In the SR, there is a trade-off between inflation and unemployment.
2. When inflation is higher or lower than what people expect, inflation expectations adjust. The changed inflation expectations will generally shift the SR Phillips curve up or down.
3. The LR Phillips curve is vertical at the NAIRU. Unemployment above (below) the NAIRU will tend to lower (increase) the rate of inflation.

DILEMMAS FOR ANTI-INFLATION POLICY

- A central concern for policy makers is the cost of reducing inflation. Reducing inflation entails lower national output and higher unemployment rate. Current estimates indicate that a substantial recession is necessary to slow expected inflation.

- As the government debt increases, people's holdings of other assets will be reduced. This occurs because as the government sells its bonds (liability: bond issuances), other assets must be reduced. These other assets ultimately represent the stock of private capital (i.e., stocks, bonds and mortgages).
- The higher debt may increase interest rates and stimulate domestic saving.

ADVANCES IN MODERN MACROECONOMICS

1. ***Classical Macroeconomics and Say's Law***

- Business cycles are viewed as temporary and self-correcting aberrations.
- Say's Law of Markets:
    - Overproduction is impossible by its very nature. This is sometimes expressed as "supply creates its own demand."
    - This law rests on a view that there is no essential difference between a monetary economy and a barter economy.
- In the classical world, output is determined by AS and AD affects only the price level.
- The classical view is that the economy moves automatically toward its full employment equilibrium. Changes in the MS, fiscal policy, I or other spending factors have no lasting impact upon output or employment. Prices and wages adjust quickly and flexibly to maintain full employment.

2. ***New Classical Macroeconomics***

a. Rational Expectations

- Rational expectations hypothesis states that expectations are unbiased and based on all available information. This implies that people understand how the economy works and what the government is doing.

b. Real Business Cycles (RBC)

- The major application of modern classical macroeconomics.
- This approach holds that business cycles are primarily due to technological shocks and do not invoke any monetary or demand side forces.
- In this approach, shocks to technology, investment or labor supply change the potential output of the economy. These supply shocks are transmitted into actual output by the fluctuations of AS and are completely independent of AD.
- Standard Keynesian monetary and fiscal policies have no effect on output or employment in RBC models.

3. *Ricardian View of Fiscal Policy*

- Developed by Robert Barro (Harvard University).
- This view argues that changes in tax rates have no impact upon consumption spending. This idea is a logical extension of the life-cycle model of consumption. Under the Ricardian view, individuals are far-sighted and form part of a succession of family members like a dynasty. Parents care not only about their consumption but also about the well-being of their children; the children, in turn, care about the well-being of their own children; and

so on. This structure called "dynastic preferences" implies that the current generation's horizon stretches into the indefinite future through the overlapping concerns of each generation about its offspring.

- If the government cuts taxes but leaves expenditures unchanged, this necessarily requires increased government borrowing. But, with unchanged expenditures, the government will have to raise taxes at some point in the future to pay the interest on its new borrowing.
- In the Ricardian view, consumers have rational expectations about future policies, so when a tax cut occurs, they know they must plan for a future tax increase. They will therefore increase their saving by the amount of the tax cut and their consumption will remain unchanged.
- The net result in the Ricardian view is that tax changes have no impact on consumption.

4. *Efficiency Wage Theory*
   - Developed by Edmund Phelps, Joseph Stiglitz and Janet Yellen
   - It explains the rigidity of real wages and the existence of involuntary unemployment in terms of firms' attempts to increase productivity by keeping wages above the market-clearing level.
   - According to this theory, higher wages lead to higher wages lead to higher productivity because workers are healthier, because workers will have higher morale and be less likely to surf the internet at work for fear of losing their jobs, because good workers are less likely to quit and look for new jobs, and because higher wages may attract better workers.
   - As firms raise their wages to increase workers' productivity, job-seekers may be willing to stand in line for these high-paying jobs, thereby producing involuntary unemployment.
   - The innovation in this theory is that involuntary unemployment is an equilibrium feature and will not disappear over time.

5. *Supply-Side Economics*
   - Espoused by President Reagan and Prime Minister Thatcher
   - Emphasized incentives and tax cuts as a means of increasing economic growth.
   - They argued that Keynesians excessive concern with the business cycle had ignored the impact of tax rates and incentives on economic growth. According to supply-siders, high taxes lead people to reduce their labor and capital supply.
   - Supply-side economist Arthur Laffer suggested that high tax rates might actually lower tax revenues. This Laffer curve proposition holds that high tax rates shrink the tax base because they reduce economic activity.

A NEW SYNTHESIS

- Economists today emphasize the importance of expectations.
- A useful distinction is between adaptive expectations (backward-looking approach) and the rational expectations (forward-looking approach).