

**From Leonard Silk's Economics in Plain English.  
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## **SELECTED NOTES FROM CHAPTER SIX**

### **The National Economy**

What causes a nation's economy to expand or contract? What causes inflation and unemployment? How does a national economy grow over the long run? And how can a nation's economic health and performance be improved? Those are the main questions involved in macroeconomics, the branch of economics that studies the national economy as a whole.

**THE FALLACY OF COMPOSITION:** It is often mistakenly assumed that what is true for the parts of a system is true for the system as a whole. If you stand up at a football game, you can see better, but if everybody stands up nobody can see better.

In economics, if you, as an individual, decide to save more out of your income, you will increase your wealth. But if everyone in the nation tries to save more out of income, this may reduce national wealth – by reducing, in succession, sales, the production of goods, the incomes of producers and their employees, and ultimately national saving and investment.

If you, as an individual, are able to raise your prices, that may be a good thing for your business. But if every business does the same, the obvious result will be inflation, a bad thing for the nation.

Balancing the budget so that outgo does not exceed income may be a sound rule for you and your family. But budget balancing does not always make sense for the national government; for the government to do so during a business slump when unemployment is rising would worsen the slump and increase unemployment.

Cutting wage rates may enable one employer to hire more workers; but cutting the wages of all workers may lead to fewer, not more, jobs – since workers would have less to spend on goods.

Thus, when we shift from micro- to macroeconomics, some key concepts change. The fundamental concepts of macroeconomics are not *supply* and *demand*, as in microeconomics, but *aggregate supply* and *aggregate demand*.

**AGGREGATE SUPPLY:** The capacity of a nation's total resources, at full employment, to produce goods and services. Aggregate supply is more or less fixed at any given time, but it can grow over time – as the labor force grows, industry invests in new plant and equipment, the government builds more schools, highways, airports, and other capital goods – and as science, technology, and human knowledge advance. In the short run, however, aggregate supply sets a limit on what the economy can produce, a limit that may or may not be exceeded by . . .

**AGGREGATE DEMAND:** All the money that people, businesses, and governments spend on goods and services. Instability and hardship in a national economy result when aggregate demand and aggregate supply get out of whack.

**INFLATION:** The form instability takes when aggregate demand grows more rapidly than aggregate supply, yanking up the general level of prices; this is “demand-pull inflation.” An excessive increase in the supply of money causes total demand to increase too much, and hence causes inflation.

Inflation may also result from the pressures of labor, industrial monopolies, or international cartels, driving up costs faster than productivity; this is “cost-push inflation.” Expectations of inflation may be a self-fulfilling prophecy as every seller of goods and services

raises prices and wages in an effort to keep ahead of the game; as the wheel spins on and on, this is known as “momentum inflation.”

UNEMPLOYMENT: The form that instability takes when aggregate demand falls below aggregate supply; this creates a “capacity gap,” with part of the nation’s labor force and some of its industrial plant standing idle.

The demand for labor is a “derived demand” – that is, derived from the demand for goods and services. The way to cure mass unemployment is to expand the total demand for the goods and services that the economy is capable of producing.

Unemployment also results, in the case of particular workers, from other factors, such as lack of education or skills that employers can use and are willing to pay for, or job discrimination against blacks, older people, or women, or minimum wage laws that set wages above the productive value of some workers, such as inexperienced teen-agers.

Urban decay, social unrest, and crime doubtless contribute to unemployment. Employers may move their plants or offices away from troubled city centers to the suburbs or other states, and workers may be unable to follow because of family circumstances or inadequate transportation or housing in the new area.

Rundown regions, such as Appalachia or parts of New England, may suffer high unemployment due to industrial stagnation and the immobility of labor.

Unemployment resulting from social, locational, technological, and specific market factors unrelated to overall weakness in the economy is called *structural* unemployment.

But when unemployment increases by the hundreds of thousands or millions over the course of a single year, you can be sure the change is due not to structural factors but to a

business slump – and insufficient aggregate demand.

The waste due to inefficient use of resources may be greatly exceeded by the waste due to involuntary unemployment. A person working inefficiently is obviously producing more than a person standing idle.

**FISCAL AND MONETARY POLICY:** The two basic ways of trying to bring aggregate demand into balance with aggregate supply, and thereby to prevent either inflation or unemployment.

**MONETARY POLICY:** The regulation by the Federal Reserve System (or Fed, as it is called for short) of the nation's money supply and interest rates.

In the United States, about one-fourth of all the money used to make payments consists of currency – coins and bills – and three-fourths consists of checks drawn against “demand deposits” in commercial banks.

United States currency is minted by the Treasury and distributed to private commercial banks by the Fed. The amount of currency put into circulation depends on how much cash individuals and businesses want to hold in the form of coins or bills.

Commercial banks can, in effect, create money by making loans to their customers (loans create demand deposits against which the borrowers can draw). But, by manipulating the reserves of the banking system, the Fed regulates *how much money* the banks can create – or must extinguish.

**MONEY SUPPLY:** The narrow definition of the money supply, M-1, is the sum of currency in circulation, demand deposits, traveler's checks, and other checkable deposits (that is, other deposits against which you can write checks).

A broader definition of the money supply, M-2, includes M-1 plus overnight repurchase agreements between banks, Eurodollars (dollars held abroad, outside the control of the United States monetary authorities), money market mutual funds, and savings and small-time deposits. A still broader definition, M-3, adds to M-2 large time deposits, longer term repurchase agreements between banks, and money market mutual fund balances held only by financial institutions. An even broader money-supply measure called L adds other liquid assets to M-3.

Thanks to the ingenuity of the financial markets, measures of the money supply are in constant flux. You can think of M-1 as the money used to buy goods and services. But time and savings deposits and other liquid assets can be converted into cash, and vice versa. Hence, one should pay attention to both the narrow and broader definitions to see how the money supply is changing.

**OPEN-MARKET OPERATIONS:** The Fed regulates the money supply chiefly by buying or selling government securities in the “open market” – that is, through security dealers, banks, businesses, and individual persons.

When the Fed is worried about *inflation*, it tightens up the money supply by *selling* government securities. This reduces the reserves of the banks and cuts their ability to make loans to the public.

When the Fed is worried about *unemployment* and a sagging economy, it *buys* government securities in the open market and thereby expands the money supply. This increases the reserves of the banks and their ability to make loans. And if individuals and businesses borrow more, this swells the aggregate demand for goods and services, and hence for labor.

**CHANGING RESERVE REQUIREMENTS:** The Fed can also spur or retard the

economy by changing the ratio of reserves that a commercial bank is required to hold against deposits. An increase in reserve requirements reduces the bank's lending ability, curbs the growth of the money supply, and checks inflation. A decrease in reserve requirements does the reverse: it increases the bank's ability to lend, spurs growth of the money supply, and tends to increase employment.

**INTEREST-RATE POLICY:** The Fed can also try to manage the economy by influencing changes in interest rates. Lower interest rates encourage borrowing, higher rates deter it. Interest rates – the price of money – are particularly important in affecting the demand for housing, autos, and other goods bought on credit.

The Fed can exert some influence on interest rates, both indirectly and directly. Indirectly, it can push interest rates up by making money “tight” – that is, by decreasing the growth of the money supply, causing borrowers to bid up the price of money. Directly, the Fed controls two key rates of interest – the Federal funds rate (which commercial banks charge each other for overnight loans) and the discount rate (which the Fed charges member banks that wish to borrow from it to replenish their reserves).

The Fed may use the Fed-funds rate or the discount rate to let the banks know that it wants other interest rates to move up or down. The Fed usually asserts that it really follows the market; but the market often follows the Fed.

Federal Reserve officials contend that, at least in the longer run, it is the expectations of borrowers and lenders about the business outlook, and particularly about inflation, that determine whether interest rates rise or fall. Fears of inflation tend to push interest rates up, as lenders seek extra compensation for the loss of the value of their money, and borrowers, expecting to gain as

prices rise, are willing to pay more. Conversely, a slowing of inflation tends to bring interest rates down. So the Fed insists that the only way it can act to prevent high and rising interest rates – so unpopular with Congressmen, stockbrokers, investors, home buyers, and others – is by preventing inflation; that is, by keeping the money supply from growing too fast. The Fed's critics often attack it for increasing the money supply too slowly, with excess unemployment and sluggish economic growth or recession the result.

**FISCAL POLICY:** Actions taken by the Federal government to stabilize the economy by increasing or decreasing Federal spending, increasing or decreasing taxes, and increasing or decreasing the deficit or surplus in the Federal budget.

The President makes the basic plan for fiscal policy when he submits his budget to Congress every year in late January. Congress, which has the power of the purse under the Constitution, either gives the President about what he wants or struggles to alter his budget, depending on its judgment on national needs and priorities – with the Congressional Budget Office to advise it on what would make a sensible fiscal policy to spur the economy or moderate it. The Federal Reserve has no official role in fiscal policy – though Fed chairmen have often engaged in a good deal of criticism of the Administration's or Congress's fiscal actions.

Constructing the national budget involves much more than deciding whether the economy needs to be stimulated or retarded. The budget is the principal national mechanism for allocating resources to the public sector or the private, and for determining priorities within the public sector. But the particular budgetary decisions on spending and taxes also need to be interrelated in order to measure their total impact on the national economy. The budget plays a major role in stabilizing or destabilizing the nation's economy.

The basic fiscal policy rules for stabilization can be simply stated:

- *If the economy is suffering from inflation caused by excess aggregate demand, reduce government spending or increase tax rates, or both.*
- *If the economy is suffering from unemployment caused by too little aggregate demand, increase government spending, reduce tax rates, or both.*

**STAGFLATION:** Economic stagnation combined with inflation.

What should fiscal policy be when the economy is suffering from the economic disease of simultaneous inflation and unemployment? The treatment will require some combination of economic balance, juggling, guessing, luck, improvisation, and specific measures aimed at specific aspects of inflation and unemployment.

In dealing with stagflation, you must first decide whether inflation or unemployment is the more serious problem and whether the economy is moving toward worse inflation or worse unemployment.

The mysterious ailment called stagflation saps a nation's . . .

**ECONOMIC GROWTH:** The expansion over a period of years of an economy's capacity to produce real goods and services.

The concept of economic growth is based on an analogy with biological growth, which has been defined as a process, indirectly resulting from chemical, osmotic, and other forces, by which material is introduced into the organism and transferred from one part of it to another, so that the organism expands. Economic growth involves similar processes in economic organisms. But what is an economic organism? It's not the flow of goods and services that issues forth every year (or every day or hour), but the complex of people, factories, stores, farms, rivers,

dams, banks and underlying ideas that produces the stream of goods and services.

What are the forces that determine the growth of the economic organism? To what extent can they be altered?

Economic growth is the result of two basic sets of causes. One is a set of cultural forces, including science, technology, population changes, religion, politics, and social attitudes toward work, material possessions, etc. The other is a set of economic factors affecting the possibility of accumulating capital funds and investing them in goods-producing equipment.

These two sets of forces, cultural and economic, must be joined if growth is to occur. The two come together in the act of investment; that is the genetic moment for economic growth. To provide the resources for investment, individuals, businesses, and the economy as a whole must refrain from consuming all of current output; that is the act of *saving*. But it is *investment* that translates saved resources into productive equipment and technology, and causes the economy to grow.

Economists divide investment into two broad categories: autonomous and induced. Autonomous investment creates its own demand; induced investment represents a response to already existing demand that forces producers to increase capacity. Autonomous investment results chiefly from new techniques of production, which cut production costs; new products, which open up new markets; new resources, which themselves often result from new technology; population growth and migration; and wars – or the “moral equivalent” of wars, such as energy crises, rioting in cities, starvation in poor countries, or “cold wars” – contests between economic systems for hegemony over third countries.

Induced investment, developing from factors within an economic system, results

primarily from changes in the level of business activity, and from the relationship of costs, prices, interest rates, and profits. An economy operating far below existing capacity stifles investment; during the Great Depression, net investment fell to zero and below – that is, we lived off past investment, ran down existing plant and equipment.

Although economic growth represents the *capacity* of the economy to produce (the *stock* of its productive resources), it is customarily measured by changes in . . .

GROSS NATIONAL PRODUCT (GNP): the *flow* of current production – the value of goods and services produced by the economy as a whole over a given time period, such as one year.

GNP is measured in two different ways: (1) the money spent to buy the output or (2) the money received for producing the output. The first is called the *flow-of-product* method; the second the *earnings-and-cost* method. Theoretically the two should always be equal – a dollar spent by a consumer equals a dollar received by a producer and spent for labor, electricity, advertising, or retained as profit.

In computing GNP, economists count only the production of final goods and services – the final product that reaches the consumer. For instance, GNP would include only the value of the packaged loaves of bread consumers have bagged at the checkout counter in a supermarket – not the gross receipts of the farmers who grew the wheat, the millers, the shippers, the packagers, the advertisers, the wholesalers, and everyone else involved in producing the final loaves of bread. The final value of the bread equals not the gross sales but the “value added” by everyone involved in the production process.

GNP can be measured either in “current dollars” – dollars measured at what they can

currently purchase – or in “constant dollars” – dollars corrected for inflation relative to some base period. GNP in current dollars is also called “nominal GNP,” and GNP in constant dollars is also called “real GNP.” (The reader in quest of data on nominal and real GNP is referred to the Appendix on page 204). Real GNP is computed by dividing nominal GNP by a price index called “the GNP deflator”; this measures a sample of prices covering the whole national economy.

There are four major components of GNP: (1) consumer spending on final goods and services; (2) business outlays on investment and consumer outlays on new housing; (3) government spending on goods and services; and (4) net exports – the difference between exports and imports.

GNP is a useful measure of total economic activity, but not of changes in social well-being. For instance, GNP counts the output of chemicals that pollute air and water the same as equipment to clean up air and water. GNP counts handguns that kill the same as medicine to save life. It does not discriminate between the values of cigarettes and vitamins. GNP puts no value at all on leisure time. And GNP data are not corrected for the destruction of natural resources.

The analysis of past changes in GNP and its components provides a basis for forecasting the national economy.

**ECONOMIC FORECASTING: Divining the future.** How do economists forecast?<sup>1</sup> The basic techniques of the art of prophecy have not changed much since ancient times; everything one can say about the future must be based on knowledge about the present and the past.

Economists still use what may be called “the loaded deck” technique – the assumption

that the future has already been determined. The stock market is in an uptrend right now, so the trend will continue. The consumer is spending more, so the consumer can be expected to go on spending more. Business is hopeful, so business will continue hopeful – and capital spending will recover. (This is all not quite as loony as it sounds; trends *do* continue – until they change. The safest prediction about tomorrow’s weather is that it will not be too different from today’s.)

Then there is the symptomatic or “straws in the wind” technique of prediction – the reading of thermometers, barometers, and economic indicators (statistical series that plot the business cycle). The index of leading indicators is up, says the economist, so there is a good chance that business will move up. But you can be sure of this only when the movement of the leading indicators has been confirmed by the coincident and lagging indicators.<sup>1</sup> (Seems like a safe enough tautology.)

Next there is the form book. Many economists follow the humorist James Thurber and say, “You could look it up.” For example, “America’s economic recoveries have, since Tojo’s

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<sup>1</sup>Among the leading indicators (those that move in advance of the business cycle) are: the average work week in manufacturing, job placements in industry, net business formations, new orders for durable goods, contracts and orders for plant and equipment, new building permits, industrial materials prices, stock prices, corporate profits after taxes, ratio of prices to unit labor costs in manufacturing, and changes in consumer installment debt.

The coincident indicators (those that roughly coincide with the business cycle) include: employees in nonagricultural establishments, the unemployment rate, gross national product in constant dollars, industrial production, personal income, manufacturing and trade sales, and sales of retail stores.

The lagging indicators (those that lag behind the business cycle) include: the unemployment rate of persons out of work for fifteen weeks or more, business expenditures on plant and equipment, the book value of manufacturing and trade inventories, labor cost per unit of output in manufacturing, commercial and industrial loans outstanding, and bank rates on short-term business loans.

All these indicators are logged in a United States Government publication called *Business Cycle Developments*.

war, run for an average of 34 months. By this ready reckoning the current recovery, now 28 months old, is nearing senility” (*The Economist*, August 6, 1977).

More profoundly, say the scholars of the form book, history is cyclical; it waxeth as it waneth. Economic philosophers can always cite history to suit their purposes, as the Devil cites scripture and the statisticians cite statistics.

Modern mathematical economists (“econometricians”) nowadays employ, for forecasting purposes, the most impressive black magic of all: science, out of the bowels of the computer. Econometricians say: “Regard this dynamic model, derived from masses of empirical data, tracing the interrelationships of many variables. It will yield quantitative outputs when you feed it quantitative inputs.”

An econometric model for forecasting the national economy is really a set of equations. The knowns (present facts or assumptions) in the equations are used as a means of deriving the unknowns (the future level of GNP, employment, unemployment, the price level, housing construction, profits, etc.). For instance, one equation might tell you that consumption will depend on income (our old “consumption function”) plus some other factors.

Another equation might tell you that business investment will depend on last year’s profits, current interest rates, and other variables.

A third equation might describe the future course of government spending, derived particularly from presently available information on the government budget. And so on.

Taken together, and solved together, all these equations will give you a picture of the future based on presently available information and past relationships among economic variables.

The econometric models, however huge and sophisticated, rarely disclose anything

surprising or dramatic about the future. By shifting the assumptions on which they are based, the forecasts can be made more optimistic or more pessimistic. But businessmen and government officials, who must make decisions that reach into the future, regard them as better than nothing. The “standard forecast” at least offers a reasonable basis for planning, if everything goes according to Hoyle.

Some economists distrust and even despise the huge econometric models and believe that simple, positive economic laws are better and will prevail. “OPEC will break up and oil prices will come down,” predicts a Chicago free-market economist. “A price set above the market by a cartel must lead to oversupply and underconsumption. Then OPEC will split. No cartel has ever lasted.” The only thing the free-market positivists cannot predict is when their prediction will come true. They regard this as a minor defect.

Finally there are the seers who base their forecasts not on economic laws but on insights – political insights, psychological insights, experienced, personal, insightful insights.

## Endnotes

1. See Leonard Silk and M. Louise Curley, *A Primer on Business Forecasting* (Random House, New York, 1970).