

Classical Model

Real business cycle theory seeks to explain business cycles via the classical model. There is general equilibrium: demand equals supply in every market.

An ideological conviction underlies this approach: microeconomic theory argues that markets are in equilibrium, so one must use general equilibrium theory to understand the economy.

Fundamental Economic Factors

Exogenous economic fundamentals—consumer preferences, technology, and resource endowments—determine the general equilibrium allocation of resources. These factors determine all real variables: real quantities and relative prices, including the real wage and the real interest rate.

The Cause of the Business Cycle

The cause of the business cycle is changes in the fundamental economic factors. When these factors change, the equilibrium quantities and relative prices change.

Boom and Recession

When changes in the fundamentals cause an increase in employment and product, this expansion is a boom.

When changes in the fundamentals cause a decrease in employment and product, this contraction is a recession.

Employment and Unemployment

The discussion of the labor market focusses on employment, not unemployment.

Since demand equals supply of labor, there is no involuntary unemployment. Any qualified person who wants to work can get a job at the market wage.

When the real wage rises, the supply of labor (and thus employment) increases, as people substitute goods for leisure.

Consumer Preferences

A change in consumer preferences might cause a contraction of output and employment.

For example, some argue that Europeans have become less materialistic and now have a greater desire for leisure. Hence they work less, and the national product is less.

However typically economists see this influence as a long-term structural change, not a cyclical phenomenon able to explain the business cycle.

Resource Endowments

A reduction in resource endowments might cause a contraction of output.

In particular, an increase in the world price of oil reduces profitability, so output may contract. The fall in the real wage causes workers to reduce the supply of labor and to have more leisure.

Technical Change

Usually, proponents of real business cycle theory attribute the business cycle to fluctuations in the rate of technical change. Rapid technical change causes a boom, and slow technical change results in recession.

Rapid technical change pushes out the production possibility frontier, so more is produced.

The technical change raises the marginal product of both capital and labor. The real interest rate rises. The real wage rises, so the supply of labor increases, raising employment.

Money and Prices

Money is *neutral*: money has no real effects.

In expansion, product rises, so the price level must fall.

Countercyclical Monetary and Fiscal Policy?

Potentially, the government could try to use monetary and fiscal policy to prevent a drop in national product.

However countercyclical monetary policy is not possible, as money is neutral.

Countercyclical fiscal policy is possible. For example, the government could increase highway building when other production is falling.

However this policy is pointless, as the general equilibrium allocation of resources is Pareto efficient. To counteract the drop in output is inefficient.

Success

In an economic expansion, the real interest rate and the real wage do rise.

An increase in the world price of oil does reduce product.

Failure

A failure of real business cycle theory is the prediction that prices fall in a boom. In fact, prices rise.

Involuntary Unemployment

Another failure is the refusal to admit that involuntary unemployment can occur.

Involuntary unemployment was widespread in the Great Depression, and the unemployment of both labor and capital was seen as wasteful and inefficient. Many saw the market system as a failure, not Pareto efficient.

Involuntary unemployment occurs in any severe recession. Firms reduce output and employment because they cannot sell their product; they would be happy to produce and sell more at the market price, if the demand were there.

Substitution

The real business cycle theory cannot explain the *economywide* expansion and contraction of the business cycle.

Microeconomic theory focusses on substitution effects. One activity substitutes for another. Substitution implies that some industries will expand and others will contract, so one will not see economywide expansion and contraction.

Technical Change

Technical advances should cause some industries to expand at the expense of others. Certainly this process takes place in the long run.

Thus technical change cannot explain economywide expansion.

Since technology never goes backwards, it cannot explain contraction.

Failure of Scientific Method

To make a good case for real business cycle theory, one must identify changes in the fundamental economic factors—consumer preferences, technology, and resource endowments—and then show that these changes can explain the observed changes in the economy.

A flaw in real business cycle theory is the failure to carry out this scientific method. The economist does not measure how the economic fundamentals have changed. Instead, he *infers* that they must have changed, because one observes changes in product and employment. Consequently the theory is merely asserted, but not proved.