Survey of Business Cycle Models

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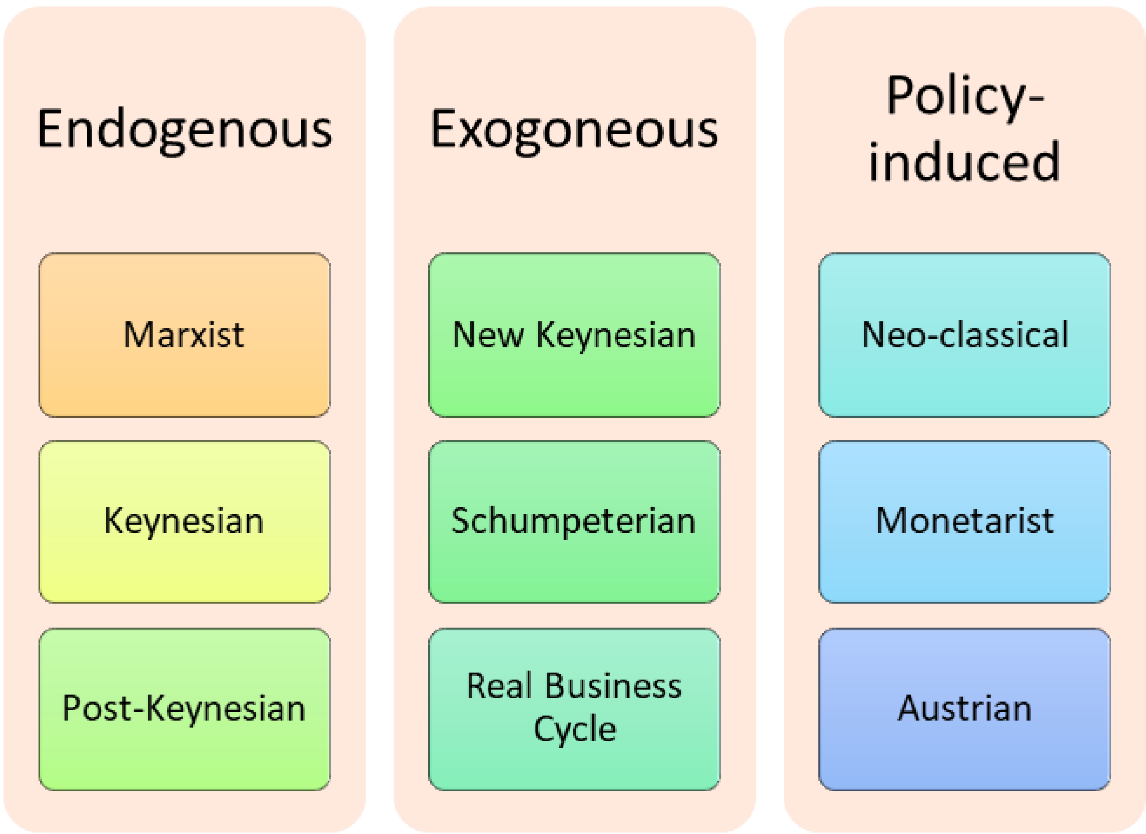
Business cycle models fall into three categories: models, which see the cycle inherent to a capitalist economy, models, which claim external factors cause the business cycle, and those models, which say government policies are the main cause of the business cycle.

The Marxist, Keynesian and Post-Keynesian theories fall into the categories of endogenous models, while for the New Keynesians, for Schumpeter, and for the Real Business Cycle models, the causes for the business cycle lie outside of the market economy and affect the economy in the form of external shocks.

The third group of policy-induced models blames economic policy as the cause of economic crises. Into this group fall the monetarist, the neoclassical, and the Austrian models of the business cycle.

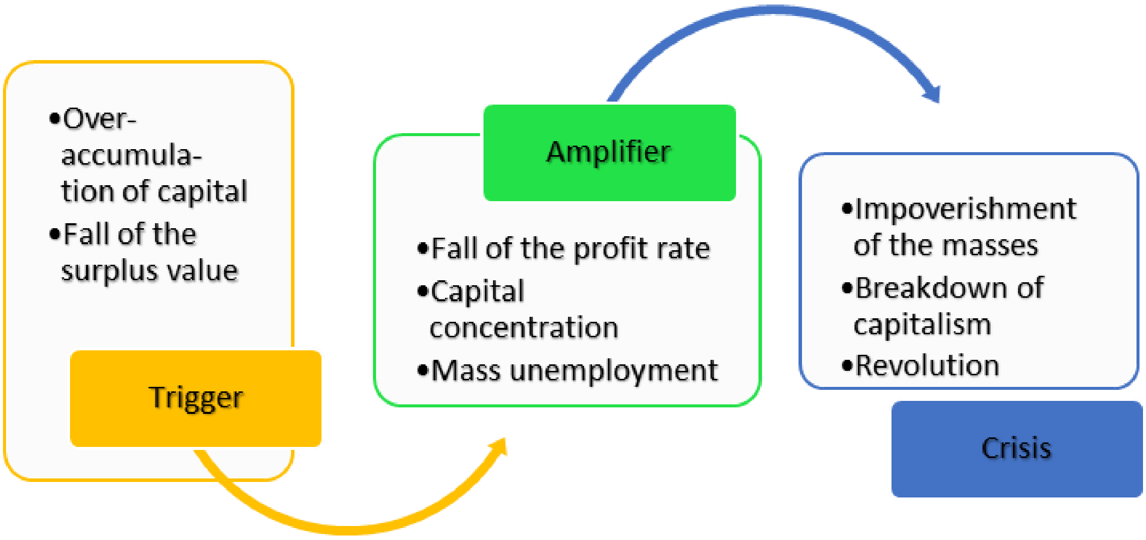
Typology of business cycle models



A. Endogenous Models

The Marxist, Keynesian, and Post-Keynesian models postulate that the causes for the business cycle are inherent to the capitalist economy. Consequently, the remedy must be the abolishment of the capitalist system (Marxian theory) or the management of capitalism through macroeconomic policies (Keynesian theory) or by comprehensive regulation (Post-Keynesian theory).

The Marxist crisis model

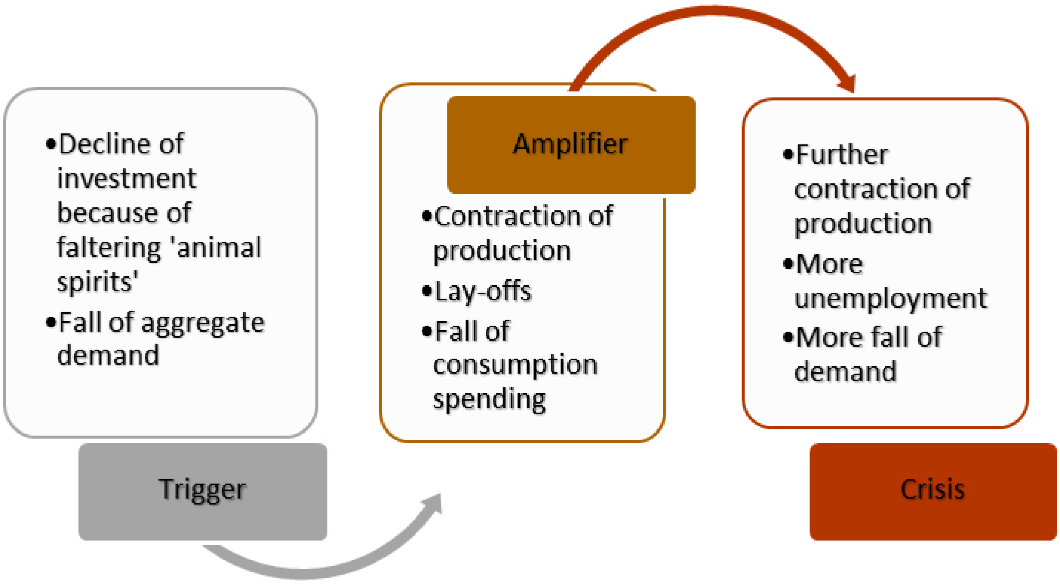


The Marxist theory of economic crises holds that capitalism brings about its own downfall because capitalist competition leads to the over-accumulation of capital and thus to the fall of the relative share of labor. According to the theory of Marx, the so-called ‘exploitation rate’ is equal to extracting ‘surplus value’ from the labor force. The profit rate shrinks with the relative share of labor in the production process.

According to the Marxian model, the decline of the surplus value leads to a fall in the profit rate. The concentration of capital increases and mass unemployment follows. Mass impoverishment prepares the collapse of capitalism. The socialist revolution puts an end to capitalism.

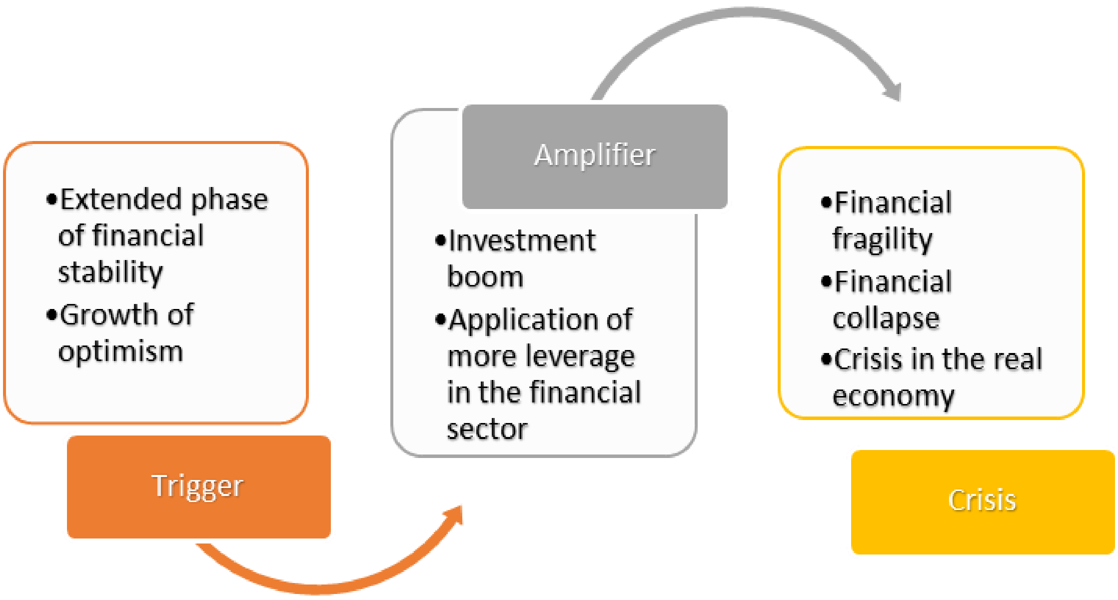
Contrary to the Marxian prognosis neither mass impoverishment nor the breakdown of capitalism have occurred. On the contrary. The freer the capitalism, the more technical progress has happened, and productivity increases. With higher labor productivity came rising income. The greatest beneficiaries of capitalism have been the members of the so-called working class, and they know it – different from their self-proclaimed leaders who either by intentions or intellectual deficiency propagate impoverishment and alienation to preach their gospel of revolution.

Keynesianism



The Keynesian economic theory suffers from the omission that it does not explain the origin of the fall of aggregate demand. This theory makes use of the psychological hypothesis of a breakdown of the entrepreneurial drive ('animal spirit'). The Keynesian model depicts a vicious cycle where declining investment leads to layoffs and the rising unemployment provokes a further decline in production. In the Keynesian model, there is no return to full employment other than through state intervention in the form of more government spending.

Post-Keynesianism



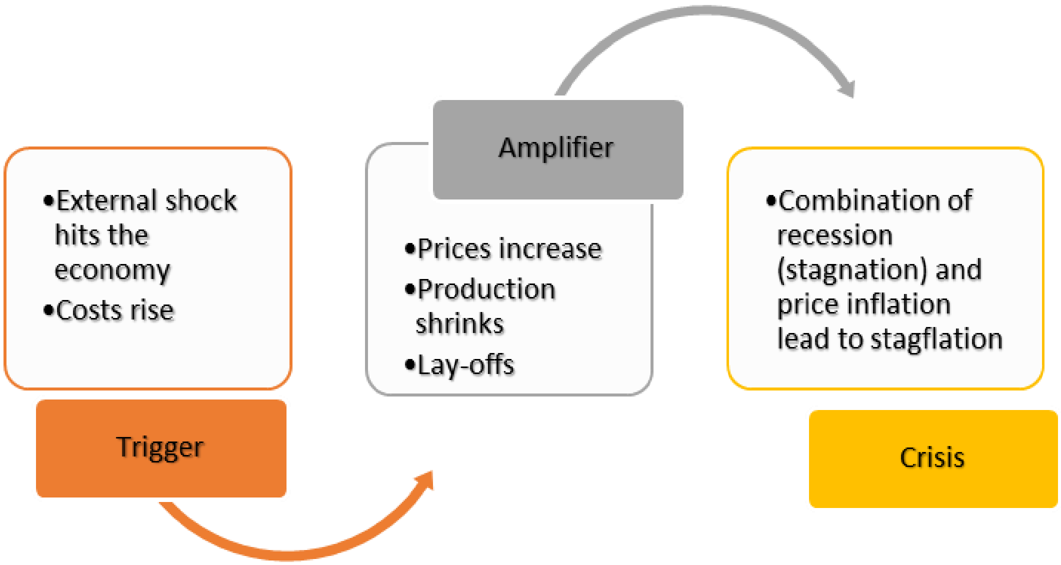
The post-Keynesian model of the economic crisis is 'endogenous' in the sense that this theory assumes that the downturn emerges from the financial system itself. Prolonged periods of stability lead to over-optimism. Rational exuberance makes it easier to get financing for investment. Stability turns into a boom. Problematic investment projects get financing. Applying financial leverage increases. Based on a narrowing capital base, more credit comes into existence. The financial system becomes fragile, and small shocks can trigger a contraction of the financial markets that will spread across the financial sector into the real economy.

The Post-Keynesian theory of the business cycle represents a poor tentative to solve the gap of Keynes' theory as to the causes of the fall of aggregate demand.

B. Exogenous Models

For the models in this group, the business cycle results from exogenous shocks. The economic actors react to these shocks, making that the economic activity speeds up or decelerates. It makes no sense to intervene in this adaptation process. Macroeconomic policy should concentrate on making the economic apparatus more flexible and take care of stabilizing the expectation, such as by a monetary policy of inflation-targeting.

New Keynesians

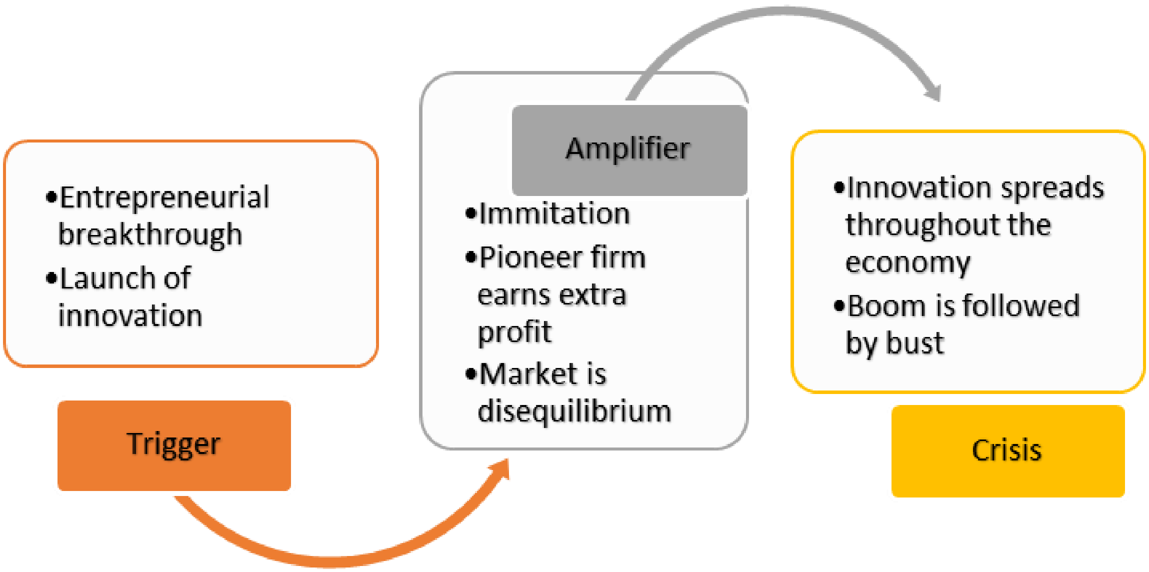


The model of New Keynesianism has been the preferred monetary policy model by the central banks since the 1980s.

The starting point of the economic cycle according to this model are positive and negative external shocks. A negative shock - such as the oil price hike of 1973 - leads to rising costs and prices and to a fall of production. The combination of stagnation and inflation push the economy into 'stagflation'.

The monetary policy rule of the New Keynesians recommends that instead of practicing fiscal policy, economic policy should focus on strengthening the supply side of the economy and increase its flexibility, particularly of the labor market. It is the purpose of monetary policy to maintain price stability and to align its measures with a pre-determined and published inflation target to stabilize expectations.

Schumpeter's business cycle model

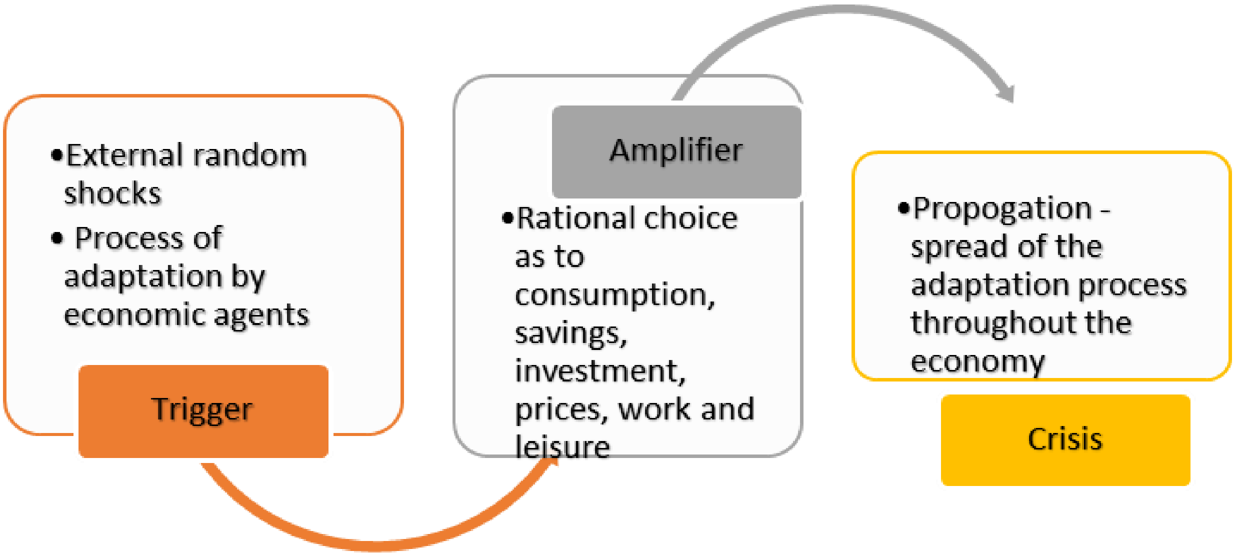


Joseph Alois Schumpeter (1883-1950) worked hard to attain his goal of developing a concise business cycle model. For this purpose, he studied to come up with a consistent framework. Yet he failed. The findings in his two-volume "Business Cycles. A Theoretical, Historical, and Statistical Analysis of the Capitalist Process", first published in 1939, show that the material is too heterogeneous to allow for a consistent model. From Schumpeter's efforts, only sketches of a theory have survived – most of it summarized in his late masterpiece 'Capitalism, Socialism, and Democracy' (first published in 1942).

According to Schumpeter, 'creative destruction' is the mark of modern capitalism and its motor is the innovative entrepreneur. Innovations disrupt existing equilibria and the innovative entrepreneur earns extra profits as long as he can hold on to a monopoly. Revolutionary innovations lead to new industries and the economy enters a long expansion.

When the innovative impetus peters out, the economy slows down, and capitalism experiences a crisis until a new cycle of innovation begins.

Real Business Cycle Theory



The real business cycle theory considers economic fluctuations as the result of a rational adaptation process to external shocks. The changes in macroeconomic variables, including demand and labor supply, are because of the choices of rational economic operators.

Statistical-econometric studies show that the model captures a large part of the economic fluctuations, mainly the small-scale fluctuations. The model does not explain how the major cyclical upswing and the severe economic crises occur. The Austrian theory of the economic cycle answers these questions.

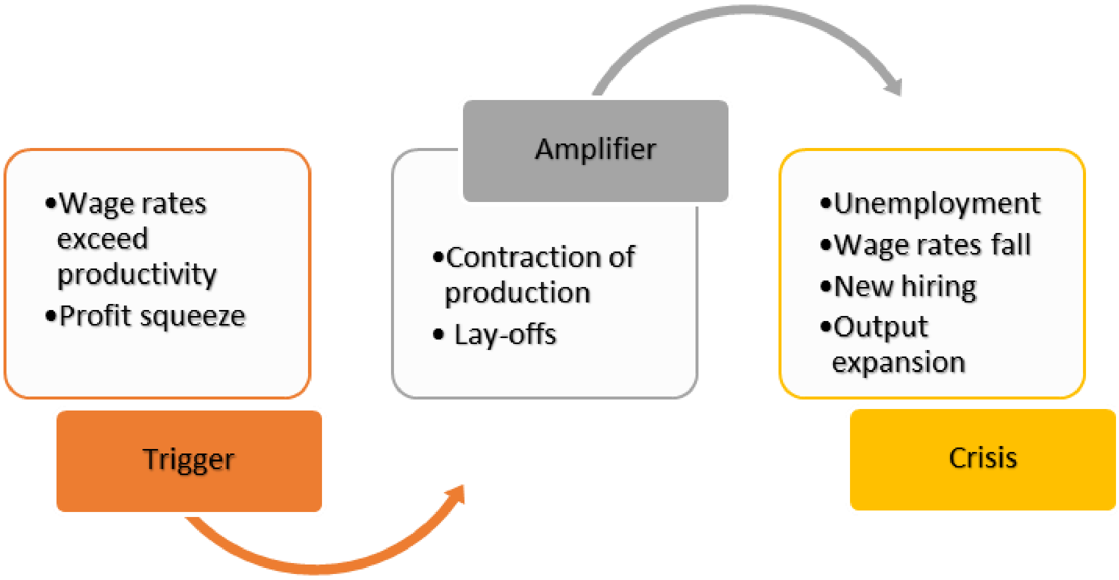
C. Policy-induced business cycle models

The policy-induced business cycle models claim the capitalist economic system works well if left to itself.

Government intervention produces dis-coordination and misallocation and moves the economy away from equilibrium.

The policy recommendation of these approaches includes abstention from interventionism, to install a rule-based monetary policy, and practice Laissez-faire.

Neoclassical crisis model



In contrast to the Keynesian model, the trigger of the crisis in the neoclassical model is well founded by economic theory.

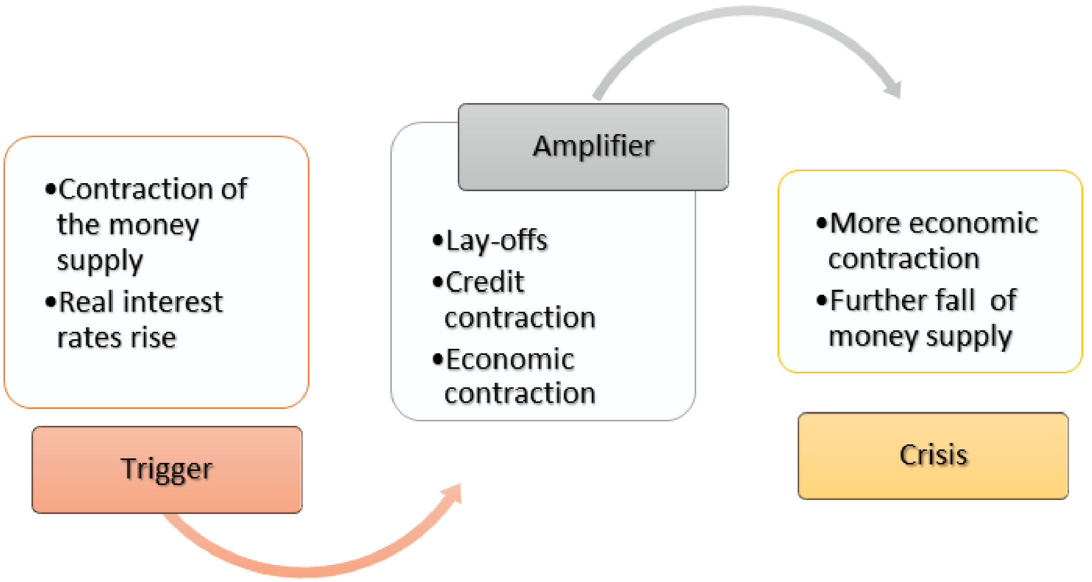
By means of trade union power or by other types of pressure (also by the state), wage claims, which exceed the productivity level occur. Firms dismiss workers to compensate for the reduction in profits and to ward off future losses.

Increased unemployment leads to a reduction in consumption expenditures and provokes further restrictions on production, which lead to further redundancies and more unemployment and production restrictions.

In as much as wage rates adapt to the marginal productivity of labor, the economy stabilizes, and an upturn begins.

The causes of distortive wage rates include minimum wage policy, trade union power, labor laws, and other kinds of regulations such as licensing.

Monetarism



Monetarists regard money as the crucial variable of the economic cycle. The monetarist model postulates that a fall in the money supply is the trigger for an economic crisis while an expanding money supply beyond production causes price inflation. The monetarists conclude that monetary policy must take care of a stable monetary growth. They propose a constant annual increase of the money supply a little more than the rate of productivity increases. Monetarism was the leading paradigm of the central banks in the late 1970s before the New Keynesianism model replaced it.

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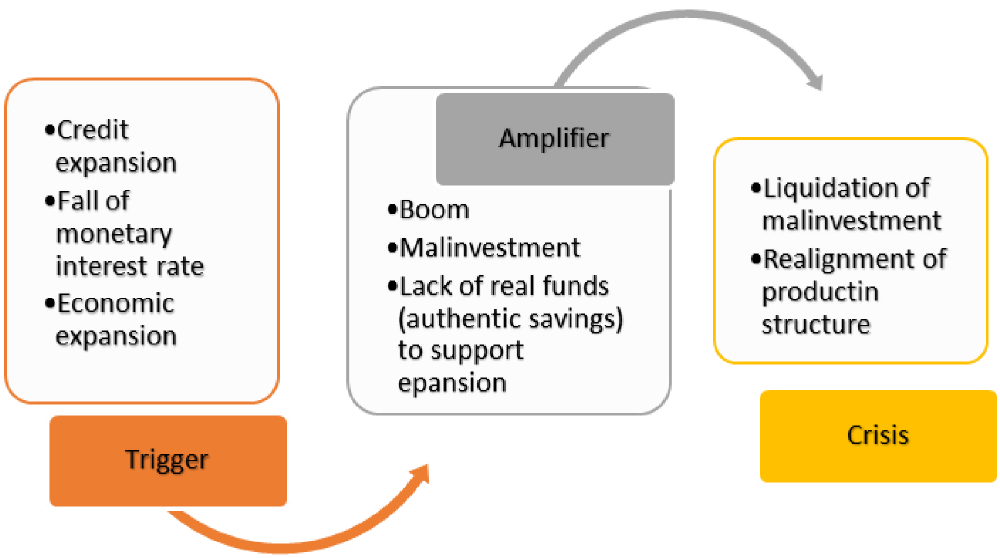
Austrian Business Cycle Theory



For the Austrians, the crisis comes through the boom which results from excessive credit expansion.

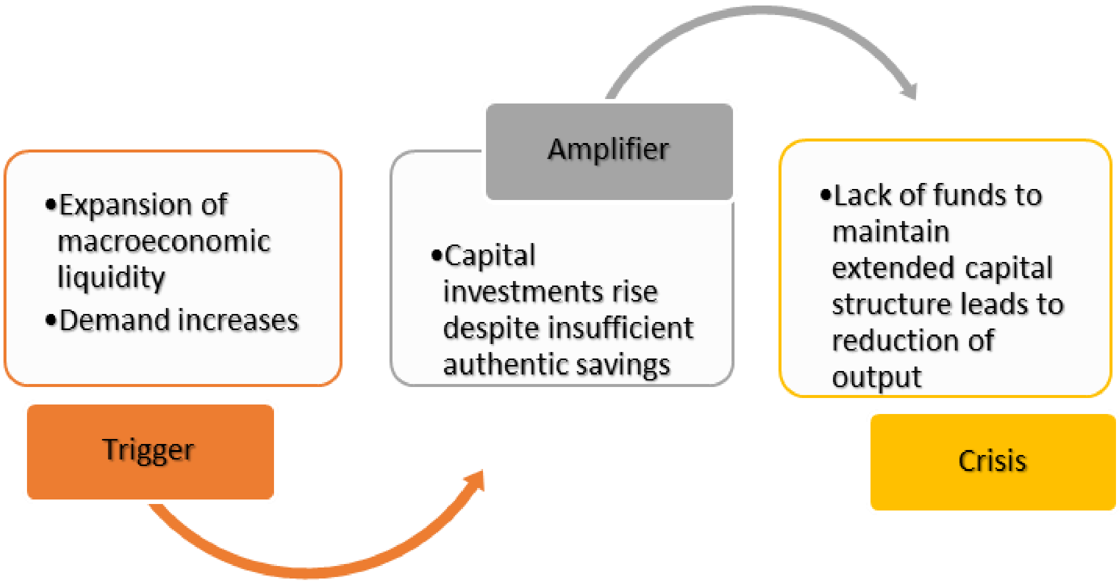
When the monetary interest rate falls below the natural interest rate due to a credit expansion, economic activity receives an artificial boost, and the economy overheats.

The credit expansion produces a false boom when authentic savings have not risen under the prerequisites of funding the prolongation of the investment projects. Because the new investments lack profitability, investors must abandon their projects. The economy falls into recession, and unemployment rises.

For the Austrians, the crisis is a process of healing since it leads to liquidate the unsustainable investment projects. The losses, real and potential, that come with the crisis, incentivize the efforts to adjust the existing capital arrangements and to move forward to establishing a new production structure.

The supporters of the Austrian school demand to abolish the central bank through either a return to the gold standard or by introducing private banking. There is also the model that calls for freezing the quantity of central bank money in combined with repealing the legal tender laws and thus leave the monetary system to the market forces.

Capital-based business cycle



The model of the 'capital-based credit cycle' represents an advanced model of the Austrian School by integrating a few of the analytical approaches from other economic theories into the Austrian model.

The capital-based credit cycle model rests on the equation of exchange whereby the amount of money multiplied by the velocity of circulation is identical to the product of price level and the output. Each of these two parts of the quantity equation is, in turn, identical to the nominal social product.

The large swings in economic activity (not mere fluctuations, as modeled by the theory of the real cycle) come from the macroeconomic liquidity, which comprises the product of the money base, the money multiplier, and the velocity of circulation. The rising investment volume collides with an insufficient level of savings, which means that the investments lack economic viability.