



JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR

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Faculty of Education and Methodology

Faculty Name- JV'n Dr. Md Meraj Alam

Program- BA (Hons) Economics 2nd Semester

Course – Macroeconomics II

Digital session name – Classical Theory of Rate of Interest

Introduction:

The economists like Ricardo, J. S. Mill, Marshall and Pigou developed the, classical theory of interest which is also known as the capital theory of interest or the saving-investment theory of interest or the real theory of interest. According to this theory, interest is a real phenomenon and the rate of interest is determined exclusively by the real factors, i.e., the supply of and demand for capital under perfect competition. The supply of capital is governed by thrift (i.e. saving) or time preference and the demand for capital is influenced by the productivity of capital.

Assumptions of Classical Theory of Interest:

(i) Perfect competition exists in the factor market.

This assumption has the following implications:

(a) The equilibrium rate of interest is determined by the competitive forces of demand and supply in the capital market.

(b) Interest rate is flexible, i.e., it freely moves to whatever level the demand and supply forces dictate.

(ii) **This assumption has the following implications:**

(a) Saving involves sacrifice of abstaining from or postponing of consumption and interest is the reward for abstinence or waiting; it is only when all resources are fully employed, higher

rate of interest is paid to induce people to save or abstain from consumption or postpone consumption

(b) Income level is assumed to be constant; it is at the full employment level that income and output do not change and become constant.

(c) The assumptions of full employment and given level of income lead to the further assumption that the demand and supply schedules of capital are independent and do not influence each other; it is only when income changes as a result of a change in investment, that saving changes in consequence.

(iii) Economic agents act rationally, i.e., they are motivated by self-interest and want to maximize economic benefit.

(iv) The price level is assumed to be constant. If it changes then the economic agents do not suffer money illusion, i.e., savers and investors react to changes in the real interest rates and not the changes in the money interest rates.

(v) Money is neutral and serves only as a medium of exchange and not as a store of value.

Supply and Demand for Capital:

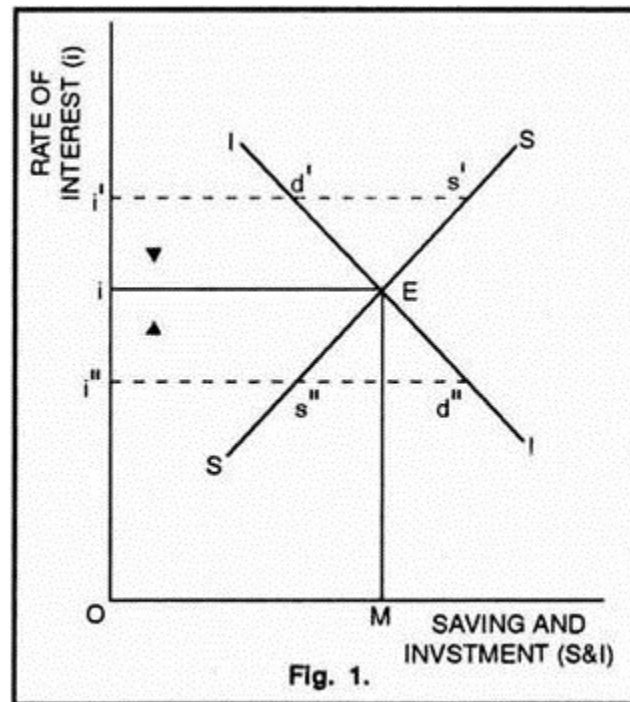
Supply of Capital:

The supply of capital depends upon savings which, in turn, depend upon a number of psychological, economic and institutional factors broadly classified as – (a) the will to save, (b) the power to save, and (c) the facilities to save. Saving means curtailment of consumption or postponement of the present consumption. Thus, saving involves a sacrifice, abstinence or waiting. The rate of interest is considered to be the reward for abstinence or waiting.

It is an inducement for the act of saving or foregoing the present consumption. In deciding between the present consumption (which involves no saving) and the future consumption (which requires saving), the individual has to take into consideration the opportunity cost of each alternative and the opportunity cost is measured by the rate of interest.

For example, if the current rate of interest is 5% then by consuming Re. 1 of income now, the individual is foregoing the consumption of Rs. 1.05 one year later. Thus, the higher the current rate of interest, the greater the opportunity cost of present consumption as compared to the future consumption, and, as a result, greater the inducement to save out of the present income.

Hence, saving is interest elastic and there is a positive relationship between the rate of interest and saving. The supply curve of capital or the saving schedule (SS curve in Figure 1) slopes upward to the right which indicates that higher the rate of interest, larger will be the savings and greater will be the supply of capital and vice versa.



Source: Internet

Demand for Capital:

Capital is demanded by the investors because it is productive and brings profits to them. The demand for capital or investment demand depends, on the one hand, on the productivity of capital, i.e., returns on investment, and on the other hand, on the rate of interest, i. e., the cost of investment. Productivity of capital is subject to the law of diminishing returns.

Additional units of capital are less productive than the earlier units; with the investment of more and more capital, the marginal productivity of capital declines. The producer will continue his investment of capital as long as the productivity of capital is more than the rate of interest and will stop further investment when the productivity of capital equals the rate of interest. This shows that at higher rates of interest, the producers demand less capital and at lower rates of interest, they demand more capital.

Thus, the demand for capital is inversely related to the rate of interest. The demand curve for capital or the investment schedule (II curve in Figure I) slopes downward to the right which indicates that higher the rate of interest, smaller the demand for capital.

Determination of Rate of Interest:

Assuming the income level to be given, the rate of interest is determined by the intersection of the demand curve and the supply curve of capital.

The determination of equilibrium rate of interest of the following three conditions:

(i) The supply of capital or saving is an increasing function of the rate of interest:

$$S = f(i); dS/di > 0$$

(ii) The demand for capital or investment is a decreasing function of the rate of interest:

$$I = f(i); dI/di < 0$$

(iii) The supply of capital equals the demand for capital:

$$S = I$$

Where, S = saving, I = investment, and i = rate of interest.

In Figure 1, the II curve (demand curve for capital) intersects the SS curve (supply curve of capital) at point E. The equilibrium rate of interest is O_i and OM is the quantity of capital demanded and supplied at this rate. In other words, at the equilibrium rate of interest, i.e., O_i , saving = investment = OM.

Any deviation from the equilibrium rate of interest (O_i) will be unstable. If, at any time, the rate of interest rises to O_i the supply of capital exceeds the demand for capital ($i' s' > i' d'$). As a result of this excess of capital supply, the rate of interest will fall to its equilibrium level (O_i). Similarly, if the rate of interest falls to O_i'' , the demand for capital exceeds the supply of capital ($i'' d'' > i'' s''$). As a result of this excess of capital demand, the rate of interest rises to its equilibrium level (O_i).

Course Outcome: The goal of this paper will be to expose the students to the basic principles of macroeconomics. The emphasis will be on thinking like an economist and course will illustrate how economic concepts can be applied to analyse real-life situations. In this course, the students are introduced to money and interest, theories of inflation, rate of interest, trade cycle and growth models.