Summary of the theory of consumption :

1. Keynes conjectured that the marginal propensity to consume is between zero and one, that the average propensity to consume falls as income rises, and that current income is the primary determinant of consumption. Studies of household data and short time-series confirmed Keynes’s conjectures .

2. Recent work on consumption builds on Irving Fisher’s model of the consumer. In this model, the consumer faces an inter-temporal budget constraint and chooses consumption for the present and the future to achieve the highest level of lifetime satisfaction. As long as the consumer can save and borrow, consumption depends on the consumer’s lifetime resources.

3. Modigliani’s life-cycle hypothesis emphasizes that income varies somewhat predictably over a person’s life and that consumers use saving and borrowing to smooth their consumption over their lifetimes. According to this hypothesis, consumption depends on both income and wealth.

4. Friedman’s permanent-income hypothesis emphasizes that individuals experience both permanent and transitory fluctuations in their income. Because consumers can save and borrow, and because they want to smooth their consumption, consumption does not respond much to transitory income. Instead, consumption depends primarily on permanent income.

 5. Hall’s random-walk hypothesis combines the permanent-income hypothesis with the assumption that consumers have rational expectations about future income. It implies that changes in consumption are unpredictable, because consumers change their consumption only when they receive news about their lifetime resources.

Investment :

The purpose of this chapter has been to examine the determinants of investment in detail. Looking back on the various models of investment, we can see three themes.

 First, all types of investment spending are inversely related to the real interest rate. A higher interest rate raises the cost of capital for firms that invest in plant and equipment, raises the cost of borrowing for home-buyers, and raises the cost of holding inventories. Thus, the models of investment developed here justify the investment function we have used throughout this book.

Second, there are various causes of shifts in the investment function. An improvement in the available technology raises the marginal product of capital and raises business fixed investment. An increase in the population raises the demand for housing and raises residential investment. Most important, various economic policies, such as changes in the investment tax credit and the corporate income tax, alter the incentives to invest and thus shift the investment function.

Third, it is natural to expect investment to be volatile over the business cycle, because investment spending depends on the output of the economy as well as on the interest rate. In the neoclassical model of business fixed investment, higher employment raises the marginal product of capital and the incentive to invest.

 Higher output also raises firms’ profits and, thereby, relaxes the financing constraints that some firms face. In addition, higher income raises the demand for houses, in turn raising housing prices and residential investment. Higher output raises the stock of inventories firms wish to hold, stimulating inventory investment. Our models predict that an economic boom should stimulate investment and a recession should depress it. This is exactly what we observe.

Summary 1. The marginal product of capital determines the real rental price of capital. The real interest rate, the depreciation rate, and the relative price of capital goods determine the cost of capital. According to the neoclassical model, firms invest if the rental price is greater than the cost of capital, and they disinvest if the rental price is less than the cost of capital.

 2. Various parts of the federal tax code influence the incentive to invest. The corporate income tax discourages investment, and the investment tax credit—which has now been repealed in the United States—encourages it.

3. An alternative way of expressing the neoclassical model is to state that investment depends on Tobin’s q, the ratio of the market value of installed capital to its replacement cost. This ratio reflects the current and expected future profitability of capital. The higher is q, the greater is the market value of installed capital relative to its replacement cost and the greater is the incentive to invest.

4. Economists debate whether fluctuations in the stock market are a rational reflection of companies’ true value or are driven by irrational waves of optimism and pessimism.

5. In contrast to the assumption of the neoclassical model, firms cannot always raise funds to finance investment. Financing constraints make investment sensitive to firms’ current cash flow. 6. Residential investment depends on the relative price of housing. Housing prices in turn depend on the demand for housing and the current fixed supply. An increase in housing demand, perhaps attributable to a fall in the interest rate, raises housing prices and residential investment. 7. Firms have various motives for holding inventories of goods: smoothing production, using them as a factor of production, avoiding stock-outs, and storing work in process. How much inventories firms hold depends on the real interest rate and on credit conditions.