In this study we have introduced investment in human capital alongside physical capital in order to develop theoretical insights on how their accumulation affects trade pattern over time. Some of the major conclusions are summarized below.

The investment in physical and human capital at any point of time is determined endogeneously as each individual tries to maximize the utility from consumption during his life-time. At the optimal consumption-investment level he equates the marginal rate of inter-temporal substitution in consumption with the rates of return on skill formation and on physical capital. Being a function of factor prices, the pattern of investment is affected by changes in the factor prices. An increase in wages induces skill formation, while an increase in rental decreases it. The response of savings to changes in wages and rental is indeterminate due to diverse income and
substitution effects. However, so long as the functional relationship, $w = \psi(r)$, exists, then, there is a maximum wage rate which corresponds with a minimum interest rate at which there is no saving. On the other hand, there may also exist a minimum wage rate such that there is no possibility of either investment.

The factor endowment ratio in the economy changes depending upon the supply of factors. The latter is determined through the aggregation of each individual's distribution of investment in physical and human capital and the natural rate of growth of population. Labor is redefined to include both human capital and 'raw' labor. The factor endowment ratio--of physical capital and composite labor--determines the pattern of specialization in the economy.

The existence of an equilibrium is established through the functional relationship between the present and future wage rates in the zone of complete specialization in production. A continuous function, $\varphi(w)$, is proved to exist within two extremes in wages--when wages in period (t) are so low as to inhibit any investment at all and when wages are so high as to deter savings. Within these two extremes, so long as the $\varphi$-curve lies above the 45° line, an
equilibrium necessarily exists. Although various equilibrium possibilities are possible, the presence of a flat segment—which corresponds with imperfect specialization—increases the likelihood of a stable equilibrium at which steady state growth results. When \( \varphi(w) \) is below the 45° degree line, equilibrium is at zero wages since productivity of labor is zero without physical capital. Alternatively, when labor productivity is at its technological minimum it results in the minimum wage rate. In the former case, the economy is on a path to extinction, while in the latter case wages are too low to induce investment in physical or human capital.

Comparative static analysis for a commodity price change shows that the essential properties of the equilibrium remain unchanged. Change in the commodity price ratio in the initial period changes the rate of accumulation of factors. The factor prices in the next period therefore respond to two forces—1. changes in the factor endowment due to changes in the accumulation of factors and secondly, to price effects emerging from reallocation of factors and a revaluation of their returns. When the consumption good is capital-intensive in production these effects cause the equilibrium wage rate to increase in all specialization zones other than perfect specialization.
in the c-good at the new and old commodity price ratios. On the other hand, when the investment good is capital-intensive in production, the change in the wage rate is indeterminate and depends upon the relative magnitude of the accumulation and price effects everywhere except in the region of specialization in the c- and m-good at both commodity price ratios. In either case, equilibrium is likely to re-emerge—in some cases after a series of iterations—at which a higher/lower wage rate and factor endowment ratio would prevail. At this latter ratio the pattern of specialization may be different from what it was initially. After this once for all change the economy settles at this specialization pattern, with the associated equilibrium wage and rate of growth of factors.