together, however, there is more support for the neoclassical model. Column 4 shows that the coefficients each have the correct sign and are statistically significant. This evidence does then support the convergence hypothesis when we control for differences in population growth and investment, implying that countries which were relatively poorer initially were beginning to catch up to the richer countries by 1988. The regression results also show that higher population growth rates hinder the growth process.

These results are consistent with the three predictions of neoclassical theory outlined above. Still, a relatively low adjusted R^2 value means that a great deal of the variation between countries within this group has been left unexplained.[9] Neoclassical theory posits that this unexplained variation, or "the Solow residual," is due to technological change which is not easily specified. Still, this unexplained variation is too large for many observers. New theories have been developed to deal explicitly with this technical change. In other words, since the three variables under consideration fail to explain the complete growth experience, technical change was thought to account for the remainder. In particular, if the difference is due to changes in the state of technology between countries, why do different countries have different rates of technical progress? This is what the new growth theory addresses.

3. Recent Developments in the Study of Economic Growth

3.1. The New Growth Theory

The so-called new growth theory, or endogenous growth theory, attempts to deal with the major shortcomings of the traditional growth theory. Namely, it explicitly attempts to endogenize the role of technical change into the model. Recall that traditional growth theory treated this phenomenon as exogenous to the model. Thus, for example, the rate of technical change is dependent on the rate of scientific advances. But what causes this to occur? How are the transmissions from pure science to commercial applications made? Certainly the Soviet Union produced its share of Nobel laureates, but was unsuccessful in developing this science into commercial products. By contrast, Japan has few (if any) Nobel laureates, but has been very effective at developing and adapting products for sale

[9]Basically, the adjusted R^2 statistic measures the amount of variation in the dependent variable (in this case, real GDP growth) that is explained by the dependent variables. The closer the R^2 value is to 1, the better the data "fit" the model.