Mainstream and alternative notions of uncertainty, time and expectations in economics are discussed. Then the consequences of relaxing some of the assumptions are examined. The relevance of the methodological issues is brought up, when economic theories are employed to deal with real economic problems. It is argued that the assumptions should be realistic. In second part of this text, it is demonstrated how a mainstream neoclassical model can be enriched with more realistic assumptions in line with the previous argumentation. The model is then analyzed using impulse response functions, simulations and long run variance of generated time series. The model manifests interesting behavior, such as path dependency. The higher persistence and lower variance can be interpreted as evidence against a view that technological shocks are main sources of business cycles.