Essays on Contemporary Macroeconomic Developments in India

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Abstract of Thesis

This dissertation studies short-run and medium-run aspects of economic growth under a set of alternative analytical frameworks. Much of growth theory is about the long-run. On the other hand understanding contemporary growth experience often requires application of short-run analysis. For instance, if one wishes to study recent Indian growth then the fact is that growth rate has been changing, quantitatively as well as qualitatively. Clearly the Indian economy is not in long-run equilibrium. Secondly, the essence of the short-run is that some conditions of equilibrium are not fulfilled. For this reason, the existence of persistent excess capacity and unemployment needs to be recognized. Therefore this study employs a short-run framework and the set of comprehensive equilibrium conditions of the long-run are not invoked. Moreover this dissertation analyzes the 'transition dynamics' associated with out-of-steady-state behaviour.

The analysis carried out in this dissertation is theoretical and preliminary. The exercises are best viewed as "experiments" using a set of alternative models. The models studied includes: (*i*) a demand-determined growth model having Keynesian features; (*ii*) a Harrod-Domar model modified to include autonomous consumption; (*iii*) a two-sector, fixed coefficients, shiftable capital model; (*iv*) a two-sector, fixed coefficients, non-shiftable capital model; (*v*) a two-sector, two-class, fixed coefficients, shiftable capital model; (*vi*) a two-sector, two-class, fixed coefficients, non-shiftable capital model; and (*vii*) a two-sector, two-class, variable coefficients, non-shiftable capital model.

An attempt has been made to analyze the models in the simplest possible manner without sacrificing rigor. The idea is not to strive for 'completeness' in incorporating *all* factors that might affect growth or to attempt the widest generality in assumptions, but simply to focus on *possible* factors and show why each is important in the least complicated manner. Differences in the outcomes of different models bring out differences in the underlying structure and assumptions. Using the analysis we address some important questions such as the following, among others: (*i*) To what extent does a change in the rate of exponential growth signal a 'structural break'? (*ii*) What are the appropriate analytical definitions of consumption-driven growth and investment-driven growth? (*iii*) What observable

characteristics of a growth path help identify if growth (or a change in growth) is consumption-driven in contrast to its being investment-driven? (*iv*) Under what conditions would market signals be useful for guiding investment allocation decisions to the long-run equilibrium growth path?

Naturally, the answers vary from one model to another. To provide just one example, while in the pure demand-determined Keynesian model increases in GDP growth do not depend on the relative strengths of investment and autonomous consumption growth rates, in the generalized Harrod-Domar type capacity constrained model it crucially does. If the investment growth rate is higher than the autonomous consumption growth rate, a one-shot rise in the latter would raise the short-run GDP growth rate in the pure demand-determined Keynesian model. However, such one-shot increases would adversely affect the short-run GDP growth rate in the generalized Harrod-Domar model. These properties together with the transitional dynamics are exploited to point out that a change in the average rate of exponential growth from time to time does not necessary signal a ‘structural break’; such changes could emerge endogenously in a given structure of the model.