AN ENDOGENOUS GROWTH MODEL
WITH R&D UNCERTAINTY

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Abstract

This thesis investigates the interplay between uncertainty, technological innovations, and economic growth in an overlapping-generations model. By introducing random shocks into the process of an expanding variety of intermediate products, the analysis provides insight into the potential connection between research and development (R&D) uncertainty and economic growth in a stochastic version of Romer’s model of technological change. Overall, the thesis presents a new perspective on studying the effects of short-run shocks on long-run growth through R&D activities. The comparative analyses show that long-run mean growth is sensitive to factors such as rate of intertemporal substitution, variance of exogenous shocks, and persistence of shocks.
Content

Abstract ........................................................................................................................................ III

Content ..........................................................................................................................................III

List of Figures .................................................................................................................................. IV

1. Introduction ................................................................................................................................ 1

2. Literature Review ................................................................................................................... 6
   2.1. New Growth Theory ........................................................................................................ 6
   2.2. Growth and Volatility ..................................................................................................... 6
   2.3. R&D and Volatility .......................................................................................................... 10

3. Benchmark Model (Certainty Model) ..................................................................................... 12
   3.1. Households .................................................................................................................... 14
   3.2. Traditional Firms ........................................................................................................... 16
   3.3. R&D Firms ..................................................................................................................... 17
   3.4. The Dynamic Equilibrium ............................................................................................. 18

4. Extended Model (Uncertainty Model) .................................................................................... 22
   4.1. Households and Other Agents ..................................................................................... 24
   4.2. The Dynamic Equilibrium in Uncertainty Model ......................................................... 25
   4.3. Intertemporal Substitution, Risk Variance, and Mean Growth ................................... 28
   4.4. The Persistence of Shocks and Mean Growth ............................................................... 31

5. Simulations and Comparative Analysis in Growth and Fluctuations .................................... 36
   5.1. Distributions of Growth Rates ....................................................................................... 36
   5.2. Uncertainty, Prudence, and Mean Growth .................................................................... 37
5.3. Short-term Volatility and Long-term Growth........................................ 40
5.4. Persistence of Shocks, Prudence, and Growth...................................... 42
5.5. Persistence of Shocks, Short-term Volatility, and Growth ................. 46
5.6. Persistence of Shocks, Volatility of GDP Growth, and Long-term Growth........................................................................................................ 51
5.7. Summary of Simulations....................................................................... 54
6. Conclusion................................................................................................... 55
7. Appendix .................................................................................................... 57
  7.1. Proof of Proposition 1 ......................................................................... 57
  7.2. Proof of Proposition 2 ......................................................................... 58
  7.3. Proof of Proposition 3 ......................................................................... 60
  7.4. Codes of Matlab Program ................................................................... 61
8. Bibliography.................................................................................................. 66

List of Figures

Figure 1: Good flow among different types of agents in the certainty model .... 14
Figure 2: Good flow among different types of agents in the uncertainty model... 24
Figure 3: Probability density function of growth rate in uncertainty.............. 37
Figure 4: Trends of savings rates in a mean-preserved spread as $\theta$ changes ... 39
Figure 6: Std. (scaled) of growth in a mean-preserved spread as $\theta$ changes... 40
Figure 8: Trends of mean growth of GDP as $\sigma$ changes with different $\theta$ .... 41
Figure 9: S.t.d. (scaled) of GDP growth as $\sigma$ changes with different $\theta$ ....... 42
Figure 10: Trends of savings rates as $\theta$ changes with different $\beta$ ...................... 44

Figure 11: Trends of GDP growth as $\theta$ changes with different $\beta$ ...................... 44

Figure 12: S.t.d (scaled) GDP growth as $\theta$ changes with different $\beta$ ................... 45

Figure 13: Serial correlation of GDP growth as $\theta$ changes with different $\beta$ ...... 45

Figure 15: Trends of mean growth of GDP as $\sigma$ changes with different $\beta$ ....... 49

Figure 16: Serial correlation of GDP growth as $\sigma$ changes with different $\beta$ ..... 50

Figure 17: Relationship of mean and std (scaled) of growth as $\sigma$ changes when $\theta^a = 1.5, \theta^b = 0.8, \beta = 0$ ..................................................................................... 52

Figure 18: Relationship of mean and std (scaled) of growth as $\sigma$ changes when $\theta^a = 1.5, \theta^b = 0.8, \beta = 0.5$ ............................................................................... 52

Figure 19: Relationship of mean and std (scaled) of growth as $\sigma$ changes when $\theta^a = 1.5, \theta^b = 0.8, \beta = 0.7$ ...................................................................................... 53