

Preface

The economic growth of a country depends on its industries. The focus of modern growth theory is basically macroeconomics, although neoclassical models use competitive markets and the optimization behavior of households and firms in general equilibrium framework. The emphasis here is on industry growth, where the microfoundations of the industry are analyzed in terms of economic efficiency. The various linkages which link firm growth with the industry growth are discerned here under various market structures, both competitive and monopolistic.

Modern economies today have undergone a dramatic change, thanks to the advent of the personal computer and communication technology. There has been a dramatic shift from material manufacturing to new innovations technology with R&D and human capital. We have entered a new information age, where efficient channels of information usage in all modern industries have achieved substantial productivity gains through increasing returns (IR) processes, learning by doing, and incremental innovations. This new paradigm of industry growth is the focus of this volume. Innovations, technology diffusion, human capital expansion, and adaptive efficiency are the key components of this new approach.

Some basic features of this volume are: (1) to explore a comprehensive theory of innovations extending the Schumpeterian perspective, (2) to develop a theory of stochastic birth and death processes for industry evolution, (3) to explore the theory of hypercompetition in the framework of noncompetitive Cournot-Nash market dynamics, and finally (4) to explore the dynamic efficiency and its role in dynamic industry growth by extending the Pareto efficiency models of competitive selection.

Two extra-market forces are discussed here in some detail. One is the dynamic role of institutions and agencies of governance, which can reduce large transactions and information costs and facilitate economic change. The second is a new view of industry growth as an evolutionary process, where dynamic flexibility and creative competence play critical roles.

The role of information in facilitating market signals and allowing the adoption of new processes has been especially emphasized in this volume. Many issues of market failure and the suboptimality of competitive equilibria are due to

incomplete and imperfect information structures and we need a comprehensive theory of information structures underlying the process of industry growth and its dynamics.

Finally, I express my deep appreciation to my wife for her constant support in my research. My four grandchildren Jayen, Aria, Shiven, and Myra provided me pleasant diversions and I enjoy their love and affection constantly. May the Trinity bless them.

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