Book review
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ADVANCED MODERN MACROECONOMICS: ANALYSIS AND APPLICATION

Gillman, M. (2011). Prentice Hall, Financial Times, England: Pearson Education Limited IISBN 978-0-273-72652-4, XVI+604

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There is a necessity to reach a consensus in macroeconomic theory and practice, which presents a great challenge. Namely, during the development of macroeconomics, many different schools of economics have developed, and consequently, there have been numerous controversies, both in terms of normative and positive analysis. During the recent years, there has been a growing interest in the emergence of new neoclassical synthesis and a new consensus in macroeconomics. The development of new neoclassical synthesis, a new macroeconomic direction, and the foundation of macroeconomic theory on microeconomic foundations have been gaining more and more attention. This involves more emphasis on the behavior of individual subjects.

The book Advanced Modern Macroeconomics: Analysis and Application, written by Max Gillman (a professor of macroeconomics at the Cardiff Business School, Cardiff University), enriches the contemporary approach to macroeconomics by using the microeconomic

foundation. The book is based on standard neoclassical models, and the main contribution of the author is reflected in the development of a new dynamic model, which can be used to explain business cycles and unemployment. In addition, the author uses and develops numerous mathematical instruments. The goal of this book is to provide explanations of how an economy functions as well as of key macroeconomic problems (e.g. economic growth, problems with business cycles, unemployment, monetary and fiscal policies and their impacts) based on the microeconomic foundations of macroeconomics. The book is primarily dedicated to those engaged in macroeconomic theory, who additionally: 1. are familiar with the basics of microeconomics and 2. have basic mathematical knowledge in terms of solving systems of equations.

The book is divided into seven parts, consisting of several chapters, with each part ending in a selection of questions and references. In the segments which more complex mathematical operations - those requiring more steps to go through in order to solve them - are included in, such mathematical operations are

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presented in more detail in the *Appendix*. The subject index is given at the end of the book.

The first part of the book, entitled *Microfoundations of Macroeconomics* (pp. 3-24), indicates the importance of the microeconomic foundations for macroeconomic analysis, by using the Theory of Optimal Equilibrium. This segment contains a short review of the concepts of aggregate demand and supply in a dynamic analysis, the role of human capital, the explanations of business cycles, as well as the explanations of the concepts of income and wealth. The goal of this chapter is to systematically introduce a reader to the basic instruments used in this book.

The second part, Labour and Goods Markets (pp. 27-120), consists of three chapters. The first segment analyzes the general equilibrium of the demand and supply of labor and goods. It also performs the trade-off of labor and leisure and, based on that, sets an equation of marginal substitution rates and real wages. Based on these microeconomic settings, the key determinant of economic growth, an increase in productivity, is derived. Also, there is a detailed explanation of the process of establishing the balance level of employment and the output, using a simple static analysis, and the explanation of the impact which taxation has on employment trends. A separate segment of the chapter is dedicated to the basic mechanisms of real income in the world trade and, based on this, macroeconomic phenomena, such as migrations of the population, education and globalization are explained.

The part entitled *Capital and Goods Market* (pp. 123-200), consists of three chapters. The first one introduces the concept of intertemporal consumption, and explains the concept of equilibrium on the capital and goods market. On this basis, the chapter examines macroeconomic implications of changes occurring in consumption. In the second chapter, the author discusses the policies concerning capital and business cycles. It also highlights the impact of changes in productivity and income endowments on generating business cycles. A special emphasis is also put on the importance of small distortions of tax rates on investments. The last chapter deals with the contribution of trade, performed on the international capital market, to the overall economic performance.

Modern AS-AD (pp. 203-293) is the title of the fourth part of the book. It deals with the models of aggregate supply and aggregate demand. In the first chapter, the AS-AD model is observed in a dynamic context, where capital stock has a primary role. In the following segment of the chapter, the author emphasizes the fact that changes in unemployment generate changes in productivity. Also, it is highlighted that, when the economic policy is performed during a recession, a huge impact of taxes on unemployment reduction should also be taken into account. The last section of the chapter deals with finding methodological solutions to using a dynamic AS-AD model.

The fifth part of the book, Growth, Human Capital and Business Cycles (pp. 297-425), consists of four chapters. The first chapter starts with the theory of exogenous growth at zero growth rates. Here, it is supplemented by the introduction of a model with positive growth since the author also analyzes the intertemporal marginal rate of substitution consumption, which determines growth. In the second chapter, the author expands the dynamic model of exogenous growth by including investments into human capital. This innovation involves changes in the AS-AD model. In the third chapter, the dynamic model is used to explain business cycles. In the end, the chapter indicates that the world trade equalizes factor prices, only in those cases where the factor productivity of human capital is different.

The title of the next part is: *Risks, Banking and Assets* (pp. 429-505). The first chapter explains the key elements of uncertainty in terms of banking, which may be crucial during a crisis. Also, this segment shows that consumption is more equal in those countries where there are no costs of transferring income. Further on, the chapter reveals that high costs of financial intermediation reduce capital investment and that sudden changes in the productivity of the banking sector lead to crisis situations. The high point of this chapter is to confirm the hypothesis that stock prices reflect future trends of dividends.

The seventh and the last part of the book, entitled *Fiscal and Monetary Policy* (pp. 510-594) consists of three chapters. The first chapter explains the system of public finances through the concept of budget limitations.

Also, this segment presents the mathematical relation between a deficit and a debt in the case of the countries of the Eurozone. Further on, the chapter emphasizes the fact that taxes on capital (primarily human capital) have a stronger influence on a fall in the economic activity and income. The last segment of the book focuses on monetary theory and policy, i.e. analyzes the effect of inflation taxes in endogenous and exogenous models of growth on the marginal rate of substitution for labor and leisure.

In addition to his being a professor, Max Gillman is a researcher at the Institute of Economics, Hungarian Academy of Sciences, and a reputable author. Taking into consideration that the book is dedicated to both undergraduate and postgraduate students, the author devotes some attention to the explanations of the fundamental concepts in economics. However, since the title of this book includes the description "advanced macroeconomics", it would be useful to include adequate examples from empirical studies conducted for certain national economies or groups of countries by using the dynamic stochastic general equilibrium model, which is widely spread in macroeconomic analyses with micro foundations. This can help evaluate certain values (e.g. of the economic policy) against the overall prosperity of a national economy. Also, in adequate models of growth, energy consumption could also be included as an additional factor of production since it is extremely important for achieving sustainable development, which is also the heart of attention in contemporary economic conditions.

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