INTRODUCING ADVANCED MACROECONOMICS:
GROWTH AND BUSINESS CYCLES


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In the book entitled: *Introducing Advanced Macroeconomics: Growth and Business Cycles*, the authors Peter Birch Sørensen (Chief Economist of the Central Bank of Denmark) and Hans Jørgen Whitta-Jacobsen (Professor of Economics at the University of Copenhagen) discuss the key macroeconomic problems related to economic growth and cyclical fluctuations of the economy, in an analytical and comprehensive manner, with an abundance of statistical data and examples. The categorical tool and methodological instruments applied in this book is what recommends it to the scientific and professional community, and can be useful to policy makers.

Bearing in mind that modern macroeconomic theory in the domain of the long-run analysis focuses the main attention on the problems of economic growth, and within the short-run analysis – it is on the problems of the business cycles, the authors have organized the book into two subsections – the first entitled: Economic growth, long-run unemployment and structural economic policy, and the second, entitled: Economic fluctuations, short-run unemployment and stabilization policy. Of the seven parts which the book consists of, the first subsection encompasses parts 1-4, while parts 5-7 are encompassed by the second subsection.

In the first part: Basic theory and empirics about prosperity and growth (pp. 55-124), the authors start from the basic variant of R. Solow’s model, in which the accumulation of capital – human and physical – is the basic factor of economic growth. The influence of the domestic savings level on the growth rate, through “the golden rule of saving”, is presented in a logical manner and shows a tendency of economic trends towards the so-called steady state. The further a particular economy is from its steady state, the higher its rates of economic growth will be, which is the basis for the hypothesis of the so-called conditional convergence between countries. In the continuation of the first part, the authors extend the analysis to the case of a small open economy, given that in terms of globalization, the country can finance part of investments using foreign sources. Apart from the positive aspects in this context (of which the most significant one is an increase in capital mobility), the authors point out the negative side, primarily associated with an increased sensitivity of the domestic economy to a global economic disruption.

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The second part, entitled: *Exogenous growth* (pp. 125-212), further approaches the Solow model to the real-world conditions, including the impact of technological progress on economic growth, so that the model can explain the long-run growth of the gross domestic product (GDP) *per capita* as opposed to the constant values characterizing the steady state, discussed in the previous part. The following analysis includes the impact of human capital on the formation of the long-run path of economic growth, as well as a restriction on growth, which are related to the scarcity of natural resources. On the example of 65 countries, the authors provide an empirical confirmation of the predictions provided by this model.

*Endogenous growth* (pp. 213-274) is the title of the third part, in which the authors go beyond the lack of the Solow model – respecting an assumption on exogenous economic growth. The endogenous growth model, which they are developing, is based on the view that the long-run growth rate, as a dependent variable, is in positive correlation with the rate of investment in physical and human capital, the growth rate of the population and, in particular, the rate of investment in research and development. In this way, the model allows the analysis of the impact of the economic policy on the long-run income to increase *per capita* through the effects of the aforementioned factors. On the example of 65 countries in the period 1960-2000, the authors demonstrate a positive relationship between the average rate of investment in physical capital, and the average growth rate of the real GDP per worker.

In the fourth section: *Structural unemployment* (pp. 275-352), the authors analyse the causes of unemployment in the short and long run: an oversupply of labour, wage rigidity in the long and short run, and a possibility of the existence of the so-called frictional unemployment. A special emphasis in explaining unemployment is put on the theory of efficiency wages and the role of trade unions. The role of the efficient wage is analysed from the microeconomic point of view, after which its implications for the whole economy are explained. The authors come to a conclusion, consistent with the current understanding, by which the balance in the labour market in the model of efficiency wages implies a certain percentage of involuntary unemployment. In a similar way, they analyse the impact of trade unions on structural unemployment, proving that the level of unemployment benefits, as well as the market power of the actors in the labour market, is positively correlated with the unemployment rate.

In the second subsection, the authors discuss the basic facts of the business cycles, their measurement, and the ways of decomposing the gap of the domestic product. In the fifth part: *The building blocks of a short-run model* (pp. 387-514) explains the basic constituent elements of the model for the analysis of the business cycles: 1) investments and asset prices, 2) consumption, income, and wealth, 3) monetary policy and aggregate demand, and 4) inflation, unemployment, and aggregate supply.

The aforementioned model is applied in the sixth part: *The short-run model for the closed economy* (pp. 515-682). It draws a clear line between the conventional understanding of the business cycles and the understanding of the theory of the real business cycles. In addition, the authors analyse the reasons for the implementation of a stabilization policy (primarily the negative impact of fluctuations in output and inflation in the social welfare), and the ways in which this policy can be implemented (discretion rights or rules, a monetary or fiscal policy, etc.), including limitations due to the problem of the time inconsistency of the economic policy. The authors also discuss the impact of the stabilization monetary policy during the Great Depression in 2007. By using a stochastic model of aggregate supply and demand (AS-AD) with adaptive expectations, which includes shocks on supply and demand, they confirm a high degree of the compatibility of the model results with the statistical data on the movement of the American economy in the period 1974-2007.

In the last, seventh part: *The short-term model for the open economy* (pp. 683-797), the authors include the capital mobility problems, purchasing power parity, and different exchange rate regimes in the model. The further analysis is based on two modes: the fixed and fluctuating exchange rate, which are included in the AS-AD model for the open economy; however, the authors do not provide an answer to the question of which exchange rate regime is better; they rather point to the necessity of respecting the specificity of a particular economy.
The inclusion of the vital elements of modern macroeconomic theory (the influence of the expectations of economic agents on the effects of an economic policy, the concept of the natural rate of unemployment, endogenous growth factors, etc.) as well as coherence and an internal consistency, make this book useful and up-to-date. The focus of the analysis on empirical research and proving initial theoretical assumptions are a valuable bridge between theory and practice. However, the study does not incorporate the specificities of developing countries and countries in transition, so the applicability of the presented models is limited to developed countries. In this sense, the use of the models for conducting a stabilization economic policy in Serbia and ensuring sustainable economic growth and development is limited by the characteristics of its economic system. Also, the short and long term are chosen as the main criterion of the analysis in the book, which can be challenged in terms of their lack of a clear demarcation in theory.

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