

Business Cycle Research in the European Economic and Monetary Union: An Introduction

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The introduction of a single currency by eleven (or, since 2001, twelve) European countries significantly changed the focus of macroeconomic analysis. The common monetary policy, by definition, refers to the whole Euro-area and addresses the aggregate business cycle. The contributions of this volume give an interesting overview about the current scientific discussion concerning Euro-area business cycles. In the years preceding the introduction of the single currency, research efforts concentrated mainly on the question whether a common cycle for the whole region exists — which is largely undisputed now. Most of the approaches presented in this volume take it for granted that there is a common cycle — or at least that the uniform monetary policy will facilitate a further convergence. Instead, current research focuses on the question of how to measure the cyclical stance in the Euro-area as a whole.

Measuring the cyclical stance of an economy is a challenging task irrespective of the area under consideration. In the first article, *Döpke* and *Chagny* give a lucid overview of the theoretical approaches that are widely used for measuring the business cycle. At the same time, this article contains an evaluation of the problems that arise in the application thereof to the Euro-area business cycle. In the second contribution, *Breitung* and *Candelon* use a frequency domain approach to address the problem of whether there is a common cycle in Europe or not.

The articles by *Krolzig* and *Schumacher* deal with the issues of identification and dating of the Euro-area business cycle. *Krolzig* uses the Markov-switching approach innovated by Hamilton in his analysis of the US business cycle. *Schumacher*, however, investigates the Euro-area business cycle using a multivariate autoregressive time series model with co-integration. The co-integration restrictions help identify permanent and transitory shocks which form the stochastic part of the trend and cyclical GDP, respectively.

The definition of the cycle is, however, only one point of interest. It is equally important to forecast the upswings and downturns. This is the question that *Anas* and *Nguiffo-*

Boyom deal with. They refer to a growth cycle definition of the business cycle and use the approach developed by Neftçi to construct a leading indicator for the Euro-area. The approach is based on the idea that in many situations a decision does not have to be made immediately, but can be delayed until additional information has been acquired. Therefore the proposed sequential analysis seems particularly applicable to the problem of predicting business cycle turning points.

Business cycle research in the Euro-area entails significant data problems, especially as regards the seasonal adjustment methods used in different member countries. So far, little research has been devoted to the question whether this influences the dating of the business cycle turning points. The paper by *Lommatzsch* and *Stephan* as well as that by *Astolfi*, *Ladiray* and *Mazzi* try to fill this gap.

The articles by *Gottschalk* and *Stolz* and by *Strauß* go beyond the narrow scope of defining and dating Euro-area business cycles. They are, nevertheless, strongly connected with the topic of this volume. In their paper, *Gottschalk* and *Stolz* ask whether the P*-model of inflation can reliably describe the price developments in the Euro-area. They simulate a simple Euro-area wide model and show that under most circumstances this model cannot deliver satisfactory results. The paper by *Strauß* contains estimations of the Euro-area trade with third countries — a very important factor in explaining business cycle movements — based on national accounts data.

Given the variety of aspects covered, we believe that the contributions in this volume give an interesting overview of the current scientific discussion related to the measurement of the Euro-area business cycle. Further research should concentrate on the policy-related issues of a common monetary policy and the coordination problems of economic policy between the national states in the Euro-area.

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