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Chapter 4 Inflation, Deflation and Employment : A Macrodynamic Approach

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Abstract

In this paper, we formulate a series of simple Keynesian macrodynamic models which can provide a systematic interpretation of the problems of inflation, deflation and (un)employment. Although the structures of our model is quite simple and transparent, there are many endogenous variables so that the dimensions of our systems are high. In fact, our models consist of four-dimensional and five-dimensional systems of nonlinear differential equations. We investigate the solutions of the systems analytically, and then we provide their economic interpretations. The models in this paper are designed to contribute to a theoretical interpretation of the macroeconomic performance of the Japanese economy during the period 1980s – 1990s. In the latter part of the paper, we compare the solution of one of our models and the basic macroeconomic data of the Japanese economy during this period, and we show that the solution of that model is consistent with the performance of the Japanese economy. The final section is devoted to the concluding remarks.

Keywords : inflation, deflation, employment, high-dimensional Keynesian macrodynamic model, Japanese economy

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Acknowledgments

Appendix A : Proof of Proposition 1

Appendix B : Proof of Proposition 2

References