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Introduction to Macroeconomics – Pluralist and Interactive

Presentation of an Online Book with Simulations

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1. Background The project MGWK

project (Modelltheoretische Gundlagen wirtschfaftspolitischer Kontroversen) ✓ The Alessandro Bramucci, Eckhard Hein, Franz Prante, Achim Truger (September 2016 – April 2019)



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Motivation and goals

- ✓A project to present macroeconomic models in an interactive and pluralist way
- ✓ Use of **digital tools** in macroeconomic **education** has increased
- ✓ However, available simulations are either too simple or too complex, often opaque and with no or little discussion of the underlying economic theory
- ✓ Mainstream economic theory dominates the academic and textbook literature
- ✓We offer an introductory textbook in macroeconomics that is interactive, academically rigorous and with a pluralist approach
- ✓We introduce first the new Keynesian textbook model and show how to derive an alternative model in line with the post-Keynesian tradition

Motivation and goals

- ✓The online textbook is designed primarily for Bachelor courses in Macroeconomics and Economic Policies, but some parts can be used in more advanced courses, e.g. at the master's level
- ✓Text and simulations are freely available online
- ✓Materials are available in English and German
- ✓ A print version of the text is in preparation (likely available later this year)

Motivation and goals

✓The project was described and presented in:

- Prante F., Bramucci A., Hein E., Truger A. (2020) Pluralist Macroeconomics – An Interactive Simulator. International Journal of Pluralism and Economics Education. Vol.11 No.1. pp.55 – 78. (in English)
- Prante F., Bramucci A., Hein E., Truger A. (2020) Interaktive Makroökonomik – ein pluraler Simulator. In: Fridrich C., Hedtke R., Ötsch W. (hs.) Grenzen überschreiten, Pluralismus wagen – Perspektiven sozioökonomischer Hochschullehre. Sozioökonomische Bildung und Wissenschaft. Springer VS, Wiesbaden. (in German)

2. The Online Book

Structure and contents

Part I - Measurement of aggregate economic activity

1. The empirical reference point of our model world

Part II - The demand side in the model economy

- 2. Aggregate demand: introduction
- 3. Private consumption
- 4. Investment
- 5. Government demand
- 6. The goods market equilibrium and the multiplier
- 7. The IS curve: the interest rate and the goods market equilibrium

2. The Online Book

Structure and contents

Part III - The supply side of the model economy

- 8. Labour supply, employment and productivity
- 9. Inflation the conflict between wage and profit claims

Part IV - Macroeconomic models

- 10. The interaction of the supply and the demand side: economic shocks and inflation
- 11. Economic policy in the 3-equation model of the "new consensus" macroeconomics
- 12. From the 3-equation model of the New consensus to the post-Keynesian model
- 13. Summary
- Appendix

Literature

2. The Online Book

How to use the book

✓ What are we going to see now?

How to access the book

The project website: <u>https://projekt.mgwk.de/index.html</u>

o The English version: <u>https://eng.mgwk.de/</u>

o The German version: <u>https://www.mgwk.de/</u>

- How to navigate through the book
- The features of the book

- **3. Interactive Simulations** Partial models
- ✓Alongside the written explanation, a series of interactive applications allow to test the "partial models" (consumption function, investment function, Phillips curve, etc.)
- ✓Users can change values of the parameters and of the exogenous variables
- ✓In some cases, there are small exercises to be solved or targets that need to be achieved
 - Consumption function from <u>chapter 3</u>
 - Vertical IS curve from <u>chapter 7</u>

- **3. Interactive Simulations** The complete model
- ✓ Full models allow to "play around" with the New Keynesian model
- ✓Introduced in chapter 11 they are meant to review the operation of the 3-equation model
- ✓No tasks or targets
- ✓Two types of simulations:
 - play round after round
 - with impulse-response functions

3. Interactive Simulations Scenarios

- ✓ In the interactive scenarios, users are guided through a series of problems that require appropriate reactions
- ✓ Users **take control** of economic policy instruments
- ✓ A series of **feedbacks** guide the users toward the correct choice
- ✓ There are six scenarios:
 - Chapter 11:
 - New Keynesian model: The case of an aggregate demand shock
 - o New Keynesian model: The case of an aggregate supply shock
 - New Keynesian model: The case of an aggregate demand shock and the preference of the central bank
 - Chapter 12:
 - New Keynesian model with simplified labour market hysteresis: The case of an aggregate demand shock
 - <u>A post-Keynesian variation of the 3-equation new consensus model: The case of a positive aggregate</u> <u>demand shock with interest rate elastic mark-up</u>
 - o Post-Keynesian Phillips curve with horizontal element: Demand shocks, fiscal policy and wage coordination

To summarise:

- ✓ Our introductory book "Introduction to Macroeconomics: Pluralist and Interactive" is aimed at courses in Macroeconomics and Economic Policies
- ✓ It is freely available online in both English and German
- ✓ Contains interactive simulations of the models presented as well as interactive scenarios to test the concepts learned in the book
- ✓ Our book has a pluralist approach: starting from the **New Keynesian** 3-equation model it shows how it is possible to obtain an alternative model in line with **post-Keynesian** thinking with diametrically different economic policy prescriptions

Thanks for your attention!

Questions?

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