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Freie Universität Berlin & DIW

Advanced Macroeconomic Analysis II

Part 1 Summer 2025

Time and venue

Wednesdays, 8-12 am: April 16th, April 30th-June 4th, DIW Berlin

Evaluation

Each part will be evaluated separately. Students need to pass both parts of the class.

Part 1: Monetary & fiscal policy (Alexander Kriwoluzky)

Overview

In recent years, monetary and fiscal policy have been at the centre of most political debates. The 2019 pandemic prompted central banks to cut their interest rates quickly, drawing on the lessons of the Great Financial Crisis. At the same time, many governments launched huge stimulus packages, leaving many economies with high levels of public debt. In times of low interest rates, high public debt is of little concern to (fiscal) policymakers.

The invasion of Ukraine led to a surge in energy prices and thus inflation. Central banks responded by raising interest rates again to fight inflation. This action could have consequences for fiscal policy - and, as the course will show, for monetary policy as well.

In this course, we begin by discussing the reasons why monetary and fiscal policymakers have reacted as they have in recent years. To this end, we will identify monetary and fiscal policy shocks and discuss their effects and transmission in the economy. Finally, we will show how they are linked and how they interact.

Introduction (Week 1)

Lecture 1: A small sample of macro-history

- Required reading: Nakamura and Steinsson (2018)
- Further readings: Friedman and Schwartz (1963); Goodfriend and King (2005); Mussa (1986); Antolín-Díaz and Rubio-Ramírez (2018)

Exercise 1: Introduction to MATLAB

Monetary policy (Week 2 and 3)

Lecture 2: Definition and effects of monetary policy shocks

- Narrative monetary policy shocks: Romer and Romer (2004); Coibion (2012); Ettmeier and Kriwoluzky (2019)
- High-frequency shocks: Gertler and Karadi (2015); Altavilla et al. (2019); Swanson (2021); Hack et al. (2023)
- Central bank information shocks: Jarociński and Karadi (2020); Miranda-Agrippino and Ricco (2020); Bauer and Swanson (2023); Swanson (2023); Holtemöller et al. (2024); Jarocinski and Karadi (2025)

Exercise 2: Monetary policy shocks and local projections

- Narrative monetary shocks in local projections: Ramey (2016); Jordà (2005)

Lecture 3: Transmission channels of monetary policy

- Interest-rate channel in New-Keynesian models: Walsh (2010); Galí (2015)
- Bank-lending channel: Gertler and Karadi (2011); Altavilla et al. (2020)
- Redistribution channel: McKay and Wolf (2023); Amberg et al. (2022); Kaplan et al. (2018); Coibion et al. (2017); Cardoso et al. (2022); Pallotti (2022)
- Energy-price channel: Ider et al. (2023)

Exercise 3: Proxy-SVAR model with monetary policy and energy price shocks

- Proxy-SVAR models: Mertens and Ravn (2013)
- Energy price shocks: Känzig (2021)

Fiscal policy (Week 4 and 5)

Lecture 4: Fiscal policy shocks and its multiplier

- Overview: Ramey (2019) - although not really impartial
- Timing restrictions on fiscal policy shocks: Blanchard and Perotti (2002); Auerbach and Gorodnichenko (2012)

- Pre-announcement and Non-invertibility of a VAR model: Ramey (2011); Kriwoluzky (2012)
- Narrative fiscal shocks on proxy VAR models: Ramey (2011); Born et al. (2020)
- State-dependent fiscal multiplier: Auerbach and Gorodnichenko (2012, 2014); Ramey and Zubairy (2018)
- Sign-dependent fiscal multiplier: Barnichon et al. (2022); Zeev et al. (2023); Born et al. (2024)
- Regional Multiplier: Nakamura and Steinsson (2014); Chodorow-Reich (2019)

Exercise 4: comparison of Proxy-VAR and local projections

- Comparison of both methods: Li et al. (2021); Plagborg-Møller and Wolf (2021)

Lecture 5: Transmission channels of fiscal policy

- Transmission channels of fiscal policy: King and Baxter (1993); Galí et al. (2007); Auclert et al. (2018); Ferriere and Navarro (2024); Cox et al. (2024)
- Fiscal policy and energy crisis: Bayer et al. (2023)
- Military spending and government investment: Ilzetzki (2025); Antolin-Diaz and Surico (2022); Clemens et al. (2025); Boehm (2020)

Exercise 5: Introduction to Dynare

- Find out more [by clicking here](#)

Interaction of monetary and fiscal policy (Week 6 and 7)

Lecture 6: Why money has value

Exercise 6: New Keynesian model with monetary-fiscal interaction in Dynare

Lecture 7: Fiscal theory of the price level (FTPL)

- Introduction of FTPL: Leeper (1991, 2011); Leeper and Leith (2016); Cochrane (2023); Bianchi et al. (2023)
- Empirical evidence: Kliem et al. (2016); Ettmeier and Kriwoluzky (2024); Bianchi and Ilut (2017)

Readings

- Altavilla, C., Brugnolini, L., Gürkaynak, R. S., Motto, R., and Ragusa, G. (2019). Measuring euro area monetary policy. *Journal of Monetary Economics*.
- Altavilla, C., Canova, F., and Ciccarelli, M. (2020). Mending the broken link: Heterogeneous bank lending rates and monetary policy pass-through. *Journal of Monetary Economics*, 110.
- Amberg, N., Jansson, T., Klein, M., and Picco, A. R. (2022). Five facts about the distributional income effects of monetary policy shocks. *American Economic Review: Insights*, 4(3):289–304.
- Antolín-Díaz, J. and Rubio-Ramírez, J. F. (2018). Narrative sign restrictions for SVARs. *American Economic Review*.
- Antolin-Diaz, J. and Surico, P. (2022). The Long-Run Effects of Government Spending. CEPR Discussion Papers 17433, C.E.P.R. Discussion Papers.
- Auclert, A., Rognlie, M., and Straub, L. (2018). The Intertemporal Keynesian Cross. *National Bureau of Economic Research*.
- Auerbach, A. J. and Gorodnichenko, Y. (2012). Measuring the output responses to fiscal policy. *American Economic Journal: Economic Policy*.
- Auerbach, A. J. and Gorodnichenko, Y. (2014). Fiscal Multipliers in Recession and Expansion. In *Fiscal Policy after the Financial Crisis*.
- Barnichon, R., Debortoli, D., and Matthes, C. (2022). Understanding the Size of the Government Spending Multiplier: It’s in the Sign [Downward Wage Rigidity and Business Cycle Asymmetries]. *Review of Economic Studies*, 89(1):87–117.
- Bauer, M. D. and Swanson, E. T. (2023). An Alternative Explanation for the ‘Fed Information Effect’. *American Economic Review*, 113(3):664–700.
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- Bianchi, F. and Ilut, C. (2017). Monetary/Fiscal policy mix and agents’ beliefs. *Review of Economic Dynamics*, 26.

- Blanchard, O. and Perotti, R. (2002). An empirical characterization of the dynamic effects of changes in government spending and taxes on output. *Quarterly Journal of Economics*, 117(4).
- Boehm, C. E. (2020). Government consumption and investment: Does the composition of purchases affect the multiplier? *Journal of Monetary Economics*, 115:80–93.
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- Born, B., Müller, G. J., and Pfeifer, J. (2020). Does austerity pay off? *Review of Economics and Statistics*, 102(2):323–338.
- Cardoso, M., Ferreira, C., Leiva, J. M., Nuño, G., Ortiz, Á., Rodrigo, T., and Vazquez, S. (2022). The heterogeneous impact of inflation on households’ balance sheets. *Red Nacional de Investigadores en Economía Working Paper*, 176.
- Chodorow-Reich, G. (2019). Geographic cross-sectional fiscal spending multipliers: What have we learned. *American Economic Journal: Microeconomics*, 11(2):1–34.
- Clemens, M., Michelsen, C., and Rieth, M. (2025). An Estimation and Decomposition of the Government Investment Multiplier. Discussion Papers of DIW Berlin 2106, DIW Berlin, German Institute for Economic Research.
- Cochrane, J. H. (2023). *The Fiscal Theory of the Price Level*. Princeton University Press, Princeton, NJ.
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- Ider, G., Kriwoluzky, A., Kurcz, F., and Schumann, B. (2023). The Energy-Price Channel of (European) Monetary Policy. Discussion Papers of DIW Berlin 2033, DIW Berlin, German Institute for Economic Research.
- Ilzetzki, E. (2025). Guns and growth: The economic consequences of defense buildups.
- Jarociński, M. and Karadi, P. (2020). Deconstructing monetary policy surprises-The role of information shocks. *American Economic Journal: Macroeconomics*, 12(2).
- Jarocinski, M. and Karadi, P. (2025). Dp19923 disentangling monetary policy, central bank information, and fed response to news shocks. CEPR Discussion Paper 19923, CEPR Press, Paris & London.
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- Kaplan, G., Moll, B., and Violante, G. L. (2018). Monetary policy according to HANK.
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- Leeper, E. M. and Leith, C. (2016). Understanding Inflation as a Joint Monetary–Fiscal Phenomenon. In *Handbook of Macroeconomics*, volume 2.
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