Short Information on the Seminar "Macroeconomic Stabilization in Severe Economic Crises"

Schedule and Information:

- The seminar will take place on 3 July 2026.
- Seminar theses have to be handed in on 17 June by midnight.
- Seminar topics will be handed out in a meeting on 4 February at 945 (room, LG 3.152).
- Each topic can be selected by up to two people.
- If two people choose the same seminar topic, they have to hand in one seminar paper and give a joint presentation. Except in very special cases, group members will obtain the same grade.
- During your seminar work, it is advisable to visit the supervisors one to three times (unless the supervisor expresses a different preference).
- You have a target of 15 written pages (plus references and Appendices). Deviations of +/- 10 percent are allowed. Larger deviations will affect the grade.
- Important: This is a seminar for the students in the Master in Economics. You should have attended Macroeconomics: Business Cycles, as most topics require some knowledge in dynamic macroeconomics and simulations.

Topic 1: Financial frictions and the external finance premium (Supervisor: Christian Merkl)

Brief Topic Description:

Choose a DSGE model with financial frictions (for example, Bernanke et al., 1999, Gertler and Karadi, 2011), understand the model mechanism and explain how the model economy (in particular, the external finance premium) reacts to aggregate shocks. Contrast the model simulation with empirical patterns from the data for the Eurozone and/or the United States. Twist the model to improve the model fit (this can go from simple recalibration to adding some small model modification).

Literature:

- Bernanke, Ben S., Gertler, Mark, and Gilchrist, Simon (1999). Chapter 21 The financial accelerator in a quantitative business cycle framework, *Handbook of Macroeconomics*, Volume 1, Part C, 1341-1393.
- Gertler, Mark, and Karadi, Peter (2011). A model of unconventional monetary policy, *Journal of Monetary Economics*, Volume 58, (1), 17-34.
- Kick, Thomas, Malinkovich, Swetlana, and Merkl, Christian (2020), Loan supply and bank capital: A micro-macro linkage, *Journal of International Money and Finance*, Volume 104, 102166.
- Rannenberg, Ansgar (2016). Bank Leverage Cycles and the External Finance Premium, *Journal of Money, Credit and Banking*, Vol. 48 (8), 1569-1612.

Topic 2: The Shimer puzzle and discount factor shocks (Supervisor: Christian Merkl)

Brief Topic Description:

The search and matching model has been criticized for a lack of labor market amplification (see Macro: Business Cycles lecture). Much of this debate was discussed in the context of productivity shocks. However, some authors propose discount factor shocks as a more suitable alternative. Simulate a search and matching model with discount factor shocks, explain why these shocks generate results

that seem to be closer in line with the data. Critically reflect on the appropriate meaning and calibration of these shocks.

Literature:

- Albertini, Julien & Poirier, Arthur, 2014. Discount factor shocks and labor market dynamics, SFB 649 Discussion Papers 2014-033, Humboldt University Berlin.
- Hall, Robert E. (2017), High discounts and high unemployment, *American Economic Review*, Vol. 107, 2, 305–30.

Topic 3: COVID-19 Government Response and Its Impact on the Labor Market in Europe (Supervisor: Kristina Saveska)

Brief Topic Description:

Analyze the governmental response to COVID-19 in Europe using the Oxford COVID-19 Government Response Tracker (OxCGRT) database. Investigate the relationship between the implemented policy measures and labor market outcomes during the pandemic. Compare and interpret the findings across selected European countries (or a specific country).

Source:

https://github.com/OxCGRT/covid-policy-dataset

Topic 4: Do Banking Crises Leave Permanent Scars on Unemployment? Evidence from a Cross-Country Panel (Supervisor: Kristina Saveska)

Brief Topic Description:

Analyze whether unemployment returns to its pre-crisis level following systemic banking crises or whether such crises lead to persistent increases in unemployment. The analysis should be based on a cross-country panel constructed from the Global Macro Database and should focus on the dynamic evolution of unemployment in the aftermath of crisis episodes. Consider an additional comparison of unemployment dynamics across advances and emerging economies based on crisis indicator availability.

Source:

https://globalmacrodata.com/data.html

Topic 5: Saving the Beveridge Curve in a Model with Endogenous Separations (Supervisor: Timo Sauerbier)

Brief Topic Description:

Modelling endogenous separations is a realistic extension of the well-known Search and Matching model in which separations are often assumed to be exogenous (see, e.g., Shimer 2005). As it turns out, introducing endogenous separations into the model often leads to undesirable results, e.g., with regard to the correlation of vacancies and unemployment (Krause and Lubik, 2007). In this topic, your task is to extend the model you know from the Macroeconomics: Business Cycles class by allowing for endogenous job separations. You should then simulate the extended model and analyze the

correlation of vacancies and unemployment. Finally, you should investigate how the negative correlation between vacancies and unemployment can be restored or strengthened.

Literature:

- Krause, M. U., & Lubik, T. A. (2007). The (ir)relevance of real wage rigidity in the New Keynesian model with search frictions. *Journal of Monetary Economics*, 54(3), 706-727.
- Shimer, R. (2005). The cyclical behavior of equilibrium unemployment and vacancies. *American Economic Review*, 95(1), 25-49.

Topic 6: Profit Share and Labor Share over the Business Cycle (Supervisor: Timo Sauerbier)

Brief Topic Description:

While the trend of the labor share has become the topic of a large literature over the last decade, less is known about the cyclical behavior of the labor share and income shares in general. In this topic, your task is to work with the model of Michaillat (2014), which can be downloaded from the Macroeconomic Model Database. The model combines New Keynesian elements with a search-and-matching labor market. Your first task is to define labor and profit share in the model. You should then simulate the model and investigate the cyclical behavior of the labor share and the profit share. Finally, you should analyze which assumptions and parameters influence the cyclicality of the two income shares.

Literature:

- Michaillat, P. (2014). A theory of countercyclical government multiplier. *American Economic Journal: Macroeconomics*, 6(1), 190-217.

Topic 7: Investment and Real Returns across Different Inflation Regimes (Supervisor: Paolo Bontempo)

Brief Topic Description:

The negative distortive effects of trend inflation, defined as a non-zero steady-state inflation rate, on production and allocative efficiency in New Keynesian models are well documented in the literature (see, e.g., Ascari and Merkl, 2009). However, less is known about how trend inflation affects investment decisions and the accumulation of physical capital.
In this project, you will extend the baseline New Keynesian model from Macroeconomics: Business Cycles by introducing physical capital into the production function. You will then simulate the model to analyze how different inflation regimes influence investment dynamics and real returns on capital. Finally, you will investigate how these results depend on the capital share in production, examining how variations in capital intensity affect the relationship between trend inflation, investment, and output.

Literature:

- Ascari, G., & Merkl, C. (2009). Real Wage Rigidities and the Cost of Disinflations. *Journal of Money, Credit and Banking*, 41(2/3), 417–435.
- Baltussen, G., Swinkels, L., van Vliet, B., & van Vliet, P. (2023). Investing in Deflation, Inflation, and Stagflation Regimes. *Financial Analysts Journal*, 79(3), 5–32.

Topic 8: When does the Workers' Bargaining Power Matter? Productivity Shocks and Welfare in Search-and-Matching Labor Market (Supervisor: Paolo Bontempo)

Brief Topic Description:

In search-and-matching labor market models, workers and firms create externalities: more job seekers increase firms' chances of filling vacancies but reduce individual workers' chances of finding a job, while more vacancies have the opposite effect. Hosios (1990) shows that these externalities are fully internalized when the matching function exhibits constant returns to scale and worker's bargaining power equals the elasticity of the matching function with respect to unemployment.
In this project, you will study how deviations from the Hosios condition, i.e., alternative values of workers' bargaining power, affect the transmission of productivity shocks in the Diamond–Mortensen–Pissarides (DMP) search-and-matching framework. You may work either with the baseline DMP model as in Macroeconomics: Business Cycles or extend the analysis to a richer specification, e.g., Monacelli et al. (2010). Finally, you will assess how welfare is affected across different bargaining regimes, using the Hosios condition as benchmark for efficiency.

Literature:

- Arthur J. Hosios (1990). On the Efficiency of Matching and Related Models of Search and Unemployment, The Review of Economic Studies, Volume 57, Issue 2, April 1990, Pages 279–298.
- Monacelli, T., Perotti, R., Trigari, A. (2010). Unemployment fiscal multipliers. *Journal of Monetary Economics*, 57, 531–553. Model replication: https://www.macromodelbase.com/NK_MPT10