

# (17 Feb 2022 version) QUEEN MARY UNIVERSITY OF LONDON School of Economics and Finance

## Macro for Policy 2022, Dr Tatsuro Senga

This course aims to integrate economic analysis with macroeconomic policy issues, making use of policy cases in the UK and other countries to develop ideas and illustrate applications. It combines theory and empirical studies, familiarizing students with analytical frameworks and state-of-art empirical tools used in academic studies. It focuses on the impact of economic policy on macroeconomic performance and dynamics.

The basis for grading will be 40% on quizzes and 60% on a final project.

The synchronous class will be run for an hour with extensive class discussion. To help with this your active participation will be expected and please be prepared by completing key readings and questions posed in the lecture videos. We all make contributions to the analysis during the class. Instructors will facilitate the class discussion pose some questions. Each class will be followed by a TA session the following week and it will review the discussion in class and work on data exercises.

There will be three quizzes. Quiz 1 will cover Topic 1, 2 and 3 (all the key readings in this reading list and the discussion in class). Quiz 2 will cover Topic 4, 5 and 6. Quiz 3 will cover Topic 7, 8 and 9.

The final project will involve a group project each exploring the macroeconomic setting of one country you pick and making detailed recommendations for monetary, fiscal, or industrial policy. Given the current economic situation, this may involve studying and analyzing economic policy responses taken by governments in response to the Covid-19 pandemic. We will have your analysis and recommendations in a report (due on 5 August) and presentation during the residential week. The analysis ought to be grounded in economic theory. Groups will be formed by 19 May and I'm planning on meeting up with each group several times for consulting.

**Class Textbook:** The textbook for this course is David Romer's Advanced Macroeconomics. For those who want to have some supplementary books and use them to brush up on your Macroeconomics, you may find it helpful to check Burda and Wyplosz's *Macroeconomics: A European Text* or Greg Mankiw's *Macroeconomics*.

#### **SCHEDULE:**

#### Topic 1: Facts on the UK business cycles and growth

Key Readings for Class Discussion:

• Mankiw, N, Gregory. 2006. "The Macroeconomist as Scientist and Engineer." Journal of Economic Perspectives, 20 (4): 29-46.

#### Other readings:

- Cooley, T. F. (1995). Frontiers of Business Cycle Research. United Kingdom: Princeton University Press.
- Kehoe, Patrick J., Virgiliu Midrigan, and Elena Pastorino. 2018. "Evolution of Modern Business Cycle Models: Accounting for the Great Recession." Journal of Economic Perspectives, 32 (3): 141-66.
- Perron, Pierre & Wada, Tatsuma, 2016. "Measuring business cycles with structural breaks and outliers: Applications to international data," Research in Economics, Elsevier, vol. 70(2), pages 281-303.
- Jones, Charles I., and Paul M. Romer. 2010. "The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital." American Economic Journal: Macroeconomics, 2 (1): 224-45.
- Jones, Charles, (2016), The Facts of Economic Growth, ch. Chapter 1, p. 3-69, Elsevier
- Caselli, Francesco. 2016. "Accounting for Cross-Country Income Differences: Ten Years Later". https://openknowledge.worldbank.org/handle/10986/26105
- Caselli, F. (2005): "Accounting for Cross-Country Income Differences," in Philippe Aghion and Stephen Durlauf (eds.), Handbook of Economic Growth, Volume 1A, 679-741.
- Nelson, Edward, (2016), "The Correlation Between Money and Output in the United Kingdom: Resolution of a Puzzle
- Maddison Project Database, version 2020. Bolt, Jutta and Jan Luiten van Zanden (2020), "Maddison style estimates of the evolution of the world economy. A new 2020 update".
- Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review, 105(10), 3150-3182, available for download at www.ggdc.net/pwt

We will discuss what we need to learn through this module. To promote such a discussion, please prepare to discuss the followings:

- What is the major role of economists in government ministries?
- Do you think you will need a PhD to become a chief economist?

The TA session will discuss how to apply The Hodrick-Prescott (HP) filter.

#### **Topic 2: Productivity and economic growth**

Key Readings for Class Discussion:

• Growth accounting: multi-factor productivity estimates, UK: October to December 2019, Statistical bulletin ONS.

## Other readings:

- Klenow, Pete and Andrés Rodríguez-Clare. 1997. "Economic Growth: A Review Essay," Journal of Monetary Economics 40, December 1997, 597-618
- Klenow, Pete. 1996. "Industry Innovation: Where and Why," Carnegie-Rochester Conference Series on Public Policy 44, June 1996, 125-150.
- N. Gregory Mankiw & David Romer & David N. Weil, 1992. "A Contribution to the Empirics of Economic Growth," The Quarterly Journal of Economics, Oxford University Press, vol. 107(2), pages 407-437.
- Akcigit, Ufuk, and Sina T. Ates. 2021. "Ten Facts on Declining Business Dynamism and Lessons from Endogenous Growth Theory." American Economic Journal: Macroeconomics, 13 (1): 257-98.
- Mankiw, G. (2003) Macroeconomics, 5th Edition, Worth Publishers, New York, chapter 7 & 8.
- Romer, D. (1996) Advanced Macroeconomics, McGraw-Hill, New York, chapters 1 & 3.
- Burda, M and Wyplosz, C. (2001) Macroeconomics: A European Text, OUP, Oxford, chapter 3.

The productivity slowdown created concern among the community of policy-makers, academics and business leaders. To understand this, we review a basic theory of economic growth to see why the decline in productivity growth could be detrimental and think about productivity in more depth empirically. Please read the ONS statistical bulletin to prepare the followings:

- 1. What are the factors behind the productivity slowdown?
- 2. Why do you think the Global Financial Crisis has persistent effects on productivity?
- 3. What do you of the potential impact of Brexit on productivity in the UK?

The TA session will cover the perpetual inventory method (PIM) to produce capital stock series for the growth accounting exercise.

#### **Topic 3: Productivity across firms and countries**

Key Readings for Class Discussion:

- Syverson, Chad. 2011. "What Determines Productivity?" Journal of Economic Literature, 49 (2): 326-65.
- Caselli, Francesco. 2016. "Accounting for Cross-Country Income Differences: Ten Years Later". https://openknowledge.worldbank.org/handle/10986/26105

#### Other readings:

- Hsieh, Chang-Tai, and Peter J. Klenow. 2010. "Development Accounting." American Economic Journal: Macroeconomics, 2 (1): 207-23.
- Hsieh, Chang-Tai and Peter J. Klenow 2009. "Misallocation and Manufacturing TFP in China and India" The Quarterly Journal of Economics, Volume 124, Issue 4, November 2009, Pages 1403–1448.
- Bloom, Nicholas, and John Van Reenen. 2010. "Why Do Management Practices Differ across Firms and Countries?" Journal of Economic Perspectives, 24 (1): 203-24.

Recent research has shown the enormous productivity differences across countries, industries firms and establishments. For instance, in the US some plants are producing twice as much output as other plants even in the same industry. Then the question is why. Please prepare to discuss the following questions:

- 1. What are the difficulties of measuring productivity?
- 2. Evaluate the strengths and weaknesses of using productivity measures to assess the performance of countries and firms.
- 3. Do you think there are any general truths on what determines productivity dispersion observed in data?

The TA session will cover growth accounting to see the factors that determine growth in the UK.

#### **Topic 4: Innovation policy**

Key Readings for Class Discussion:

- Bloom, Nicholas, John Van Reenen, and Heidi Williams. 2019. "A Toolkit of Policies to Promote Innovation." Journal of Economic Perspectives, 33 (3): 163-84.
- Gaggl, Paul, and Greg C. Wright. 2017. "A Short-Run View of What Computers Do: Evidence from a UK Tax Incentive." American Economic Journal: Applied Economics, 9 (3): 262-94.

#### Other readings:

- Ufuk Akcigit & Stefanie Stantcheva, 2020. "Taxation and Innovation: What Do We Know?," NBER Working Papers 27109, National Bureau of Economic Research, Inc.
- Criscuolo, Chiara, Ralf Martin, Henry G. Overman, and John Van Reenen. 2019.
  "Some Causal Effects of an Industrial Policy." American Economic Review, 109 (1): 48-85.

The recent slowdown in productivity growth in the UK and other advanced economies provoked extensive concern among policymakers and researchers. How should we tackle the productivity slowdown? How are policies for stimulating innovation effectively? Please prepare to discuss the following questions:

- 1. How would you measure innovation activities: any pros and cons for each?
- 2. On what basis would you justify policy intervention in innovation?

3. Should we limit or promote the dominance of a few big tech companies in the UK?

The TA session will look at data related to research and development expenditure in the UK and see how compares with other advanced economies.

#### **Topic 5: Monetary policy implementation (pre-crisis and post-crisis)**

Key Readings for Class Discussion:

- The Bank of England's Sterling Monetary Framework (The Red Book)
  - ➤ October 2008 version contains more details; though, June 2015 version is also helpful to get the idea.
- Matthew Osborne. 2016. "Monetary policy and volatility in the sterling money market" BOE Staff Working Paper No. 588.

#### Other readings:

• Bank of England Market Operations Guide

https://www.bankofengland.co.uk/markets/bank-of-england-market-operations-guide

Monetary policy frameworks have evolved since the global crisis in 2008. In fact, it is insightful to look at how the Bank of England's monetary policy implementation has been evolving before and after the crisis because this will highlight the role of the central bank in influencing the economic activities and decision makings undertook by households, firms and governments. Read the Red Book and prepare to discuss the following questions:

- 1. What is the goal for the Bank of England?
- 2. What is the main tool to achieve the mandate any significant change before and after the crisis?
- 3. Why did the framework set out in normal times need change?

The TA session will work on data on the UK money market to the historical series of the policy rate, overnight money market interest rates, and the spread of overnight rates to Bank Rate.

#### **Topic 6: Monetary policy: Theory and Empirics**

Key Readings for Class Discussion:

- Cloyne, Ferreira, and Surico (2016) "Household debt and the transmission of monetary policy: New evidence", <a href="https://voxeu.org/article/household-debt-and-transmission-monetary-policy">https://voxeu.org/article/household-debt-and-transmission-monetary-policy</a>
- Economics in central banking: Greg Kaplan, Benjamin Moll and Gianluca Violante <a href="https://www.centralbanking.com/awards/3970686/economics-in-central-banking-greg-kaplan-benjamin-moll-and-gianluca-violante">https://www.centralbanking.com/awards/3970686/economics-in-central-banking-greg-kaplan-benjamin-moll-and-gianluca-violante</a>

#### Other readings:

- Galí, J. (2015): Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework. 2nd edition. Princeton University Press, Princeton.
- Walsh, C. E. (2017): Monetary Theory and Policy. 4th edition. MIT Press, Cambridge.
- Rupert, Peter & Šustek, Roman, 2019. "On the mechanics of New-Keynesian models," Journal of Monetary Economics, Elsevier, vol. 102(C), pages 53-69.
- The papers and discussions at the Federal Reserve Bank of Kansas City annual symposium in Jackson Hole:
  - ➤ 2003: Monetary Policy and Uncertainty: Adapting to a Changing Economy <a href="https://www.kansascityfed.org/publications/research/escp/symposiums/escp-2003">https://www.kansascityfed.org/publications/research/escp/symposiums/escp-2003</a>
  - 2008: Maintaining Stability in a Changing Financial System <a href="https://www.kansascityfed.org/publications/research/escp/symposiums/escp-2008">https://www.kansascityfed.org/publications/research/escp/symposiums/escp-2008</a>
- Yutaka Yamaguchi, 2008. "Commentary: central banks and financial crises," Proceedings - Economic Policy Symposium - Jackson Hole, Federal Reserve Bank of Kansas City, pages 647-650.
- Gill Hammond, 2012. "State of the art of inflation targeting," Handbooks, Centre for Central Banking Studies, Bank of England, edition 4, number 29, December.

We will see how a workhorse theory tells how monetary policy impacts inflation and the real economy. We will review a basic set of textbook materials on this; but also, discuss practical issues about conducting monetary policy under an inflation target, especially looking at a situation where housing prices are sharply rising whilst inflation looks stable. Please prepare to discuss the following questions:

- 1. How do interest rate changes affect inflation in the context of a New Keynesian model?
- 2. How do unconventional monetary policy tools (i.e., QE, forward guidance, negative interest rates, etc) affect inflation?
- 3. Do you think the Bank of England should react to rapidly growing stock prices or housing prices when inflation is around a target?

The TA session will be on MMT (**TBA**).

#### **Topic 7: Fiscal stimulus and consumption:**

Key Readings for Class Discussion:

• Johnson, David, S., Jonathan A. Parker, and Nicholas S. Souleles. 2006. "Household Expenditure and the Income Tax Rebates of 2001." American Economic Review, 96 (5): 1589-1610.

#### Other readings:

- Kaplan, G. and Violante, G.L., 2014. A model of the consumption response to fiscal stimulus payments. Econometrica, 82(4), pp.1199-1239.
- Misra, Kanishka, and Paolo Surico. 2014. "Consumption, Income Changes, and Heterogeneity: Evidence from Two Fiscal Stimulus Programs." American Economic Journal: Macroeconomics, 6 (4): 84-106.
- Heathcote, Jonathan, Kjetil Storesletten, and Giovanni L. Violante. 2009. "Quantitative Macroeconomics with Heterogeneous Households." Annual Review of Economics 1: 319–54.
- Bunn, Philip & Le Roux, Jeanne & Reinold, Kate & Surico, Paolo, 2018. "The consumption response to positive and negative income shocks," Journal of Monetary Economics, Elsevier, vol. 96(C), pages 1-15.
- Burda, M and Wyplosz, C. (2001) Macroeconomics: A European Text, OUP, Oxford, chapter 6
- Mankiw, G. (2003) Macroeconomics, 5th Edition, Worth Publishers, New York, chapter 16
- Romer, D. (1996) Advanced Macroeconomics, McGraw-Hill, New York, chapter 7. Deaton, A. (1992) Understanding Consumption, OUP, Oxford, chapters 1-4.
- Hall, R. (1978) 'Stochastic Implications of the Life Cycle-Permanent Income Hypothesis theory and implications, Journal of Political Economy, pp. 971-87.

Since the onset of the Covid pandemic, we have seen many fiscal stimulus packages that are designed to make consumers spend more, like the stimulus checks in the US and Japan. While in the US if you make more than a certain threshold the amount will be reduced incrementally, cash handouts went to every individual in Japan regardless of income level. To think about policy design, please prepare to discuss the followings:

- 1. What is the measure of the size of household consumption responses to cash handouts?
- 2. How and why do consumption responses vary across different household types?
- 3. How would you assess the potential impact of cash transfer programmes and what is the difficulty of doing so based on past experiences?

The TA session will look at how the household consumption expenditure in the UK compares with other advanced economies.

### **Topic 8: Taxes and investment**

Key Readings for Class Discussion:

• Maffini, Giorgia, Jing Xing, and Michael P. Devereux. 2019. "The Impact of Investment Incentives: Evidence from UK Corporation Tax Returns." American Economic Journal: Economic Policy, 11 (3): 361-89.

Other readings:

- Zwick, Eric, and James Mahon. 2017. "Tax Policy and Heterogeneous Investment Behavior." American Economic Review, 107 (1): 217-48.
- House, Christopher L., and Matthew D. Shapiro. 2008. "Temporary Investment Tax Incentives: Theory with Evidence from Bonus Depreciation." American Economic Review, 98 (3): 737-68.
- Bond, S. and Jenkinson, T. (1996) 'The assessment: investment performance and policy', Oxford Review of Economic Policy.
- Winberry, Thomas. 2021. "Lumpy Investment, Business Cycles, and Stimulus Policy." American Economic Review, 111 (1): 364-96.
- Burda, M and Wyplosz, C. (2001) Macroeconomics: A European Text, OUP, Oxford, chapter 6.
- Mankiw, G. (2003) Macroeconomics, 5th Edition, Worth Publishers, New York, chapter 17.
- Romer, D. (1996) Advanced Macroeconomics, McGraw-Hill, New York, chapter 8.

Tax measures aimed at promoting investment growth is a popular policy package across countries. Yet, recent research has shown mixed evidence as to what determines the effectiveness of such a policy scheme and some disconnect between micro- and macro-evidence. Please prepare to discuss the following questions:

- 1. What are the main features of investment at the micro level?
- 2. What drives the heterogeneity of investment responses to taxes and why?
- 3. How would you assess the potential impact of tax incentives to promote investment and what is the difficulty of doing so based on past experiences?

The TA session will look at how the investment rate in the UK compares with other advanced economies.

#### **Topic 9: Government debt**

Should we hurry to pay down government debt? But would cutting public spending aggressively hurt the economy? We will build a framework to think about this problem brought to the centre stage lately, and we will discuss a variety of issues ranging from MMT to the UK's austerity programs. Key readings and other papers will be added here later, please stay tuned.