

Course information 2023-24 EC2065 Macroeconomics

General information

MODULE LEVEL: 5

CREDIT: 30

NOTIONAL STUDY TIME: 300 hours

Summary

This course will cover the fundamental principles of macroeconomics at an intermediate level. Topics include the supply side of the economy and economic growth, the demand side of the economy, consumption, investment, fiscal policy, the labour market and unemployment, financial markets, banking, money and monetary policy, business cycles, inflation, and international macroeconomics.

Conditions

Prerequisite: If taken as part of a BSc degree, the following course(s) must be attempted before you can register on this course.

- EC1002 Introduction to economics AND
- **Either** MT105A Mathematics 1 (half course) **OR** MT1174 Calculus **OR** MT1186 Mathematical methods)

Aims and objectives

This course aims to bring you up to date with modern developments in macroeconomics and to help you analyse the macroeconomic issues of the day.

Learning outcomes

At the end of the course and having completed the essential reading and activities, students should be able to think about and give answers to key macroeconomic questions, for example:

- What are the forces that drive long-term prosperity?
- Is a growth slowdown in emerging economies inevitable?
- Why are real interest rates so low?
- What causes bubbles in financial markets?
- Does the government have a budget constraint?
- How does the labour market respond to structural change and shifting employment patterns?
- What is the role of banks and why are they inherently fragile?
- Is it a good idea for central banks to set up new digital currencies?
- Why does economic activity fluctuate?

- Can and should policymakers seek to ameliorate business cycles?
- What options do central banks have when nominal interest rates fall to zero?
- What are the causes of global imbalances?

The approach of the course is to discuss the salient features of the data and then go on to present macroeconomic models to study these questions.

Essential reading

The textbook for the course is Williamson, Macroeconomics, 6th ed. (2018), Pearson.

Assessment

This course is assessed by a three-hour and fifteen-minute closed-book written examination.

Syllabus

Topic 1: The supply side of the economy

Contents: Factors of production (labour, land, and capital), the production function and the supply side of the economy, the distribution of income between factors (wages, rents, and interest), population growth, labour-market participation and labour supply, taxation, competitive equilibrium and efficiency, the Solow model.

Questions to address:

- Economies before and after the Industrial Revolution.
- Why have hours worked declined in advanced economies even though wages are so much higher than in the past?
- Why has wage inequality increased in recent decades?
- Should land-value taxes be used?
- Is a growth slowdown in emerging economies inevitable?

Topic 2: Economic growth in the long run

Contents: Evidence on economic growth and the income distribution across countries, convergence, saving rates and the Golden rule, technological progress, international investment flows, institutions and misallocation, endogenous growth theory, learning by doing, human capital, research and development, diffusion of knowledge between countries.

Questions to address:

- What are the forces that drive long-run prosperity?
- Are we saving enough for the future?
- Why is the gap between rich and poor countries so large?
- How strong should intellectual property rights be?
- What are the implications of climate change for the economy?

Topic 3: The demand side of the economy

Contents: Evidence on macroeconomic fluctuations using detrended data, consumption, the relationship between consumption and income, durable and non-durable goods and services, interest rates and saving, bond yields, determinants of real interest rates, investment, the stock market, a dynamic macroeconomic model.

Questions to address:

- Why are purchases of capital goods by firms very volatile while purchases of services by households are more stable?
- Why are real interest rates so low?
- Do low interest rates discourage saving and stimulate consumption?
- Should capital and wealth be taxed to fund public expenditure instead of wages?
- Is there a link between the stock market and the amounts invested by firms?

Topic 4: Credit-market imperfections and fiscal policy

Contents: The government budget constraint, Ricardian equivalence, taxes on consumption, borrowing constraints, interest-rate spreads, asymmetric information between borrowers and lenders, limited commitment and collateral, overlapping generations, pension systems.

Questions to address:

- Can tax cuts stimulate demand?
- Why do house prices affect the economy?
- How does a financial crisis affect households' and firms' spending decisions?
- Should the government be involved in providing pensions or leave it to the market?
- How do demographics affect the pension system?
- What causes bubbles in financial markets?
- Does the government have a budget constraint?

Topic 5: Unemployment, vacancies, and wages

Contents: Unemployment and wage rigidity, efficiency wages, the process of search and matching, wage dispersion and the reservation wage, labour-market flows, vacancies and the Beveridge curve, wage bargaining, job creation, and labour-market tightness.

Questions to address:

- Why does unemployment occur, even when job vacancies are unfilled?
- How does the labour market respond to structural change and shifting employment patterns?
- What are the effects of labour-market institutions such as unemployment insurance?
- What was the role of job-support schemes during the Covid pandemic?

Topic 6: Money and monetary policy

Contents: The nature and functions of money, money's role as a medium of exchange with search and matching, inflation and interest rates, the demand for money and credit as a substitute for money, the fiat monetary system, the effects of monetary policy on inflation and economic activity, controlling inflation using Taylor rules, the lower bound on nominal interest rates.

Questions to address:

- Why has the link between money supply growth and inflation been unstable?
- What advantages do governments derive from being able to create money?
- What are hyperinflations and why are they so damaging?
- How should central banks conduct monetary policy?
- Is it better to have a monetary system without physical cash?
- Can and should nominal interest rates ever be negative?
- How do cryptocurrencies differ from existing forms of money?

Topic 7: Banking, finance, and the money markets

Contents: Fractional reserve banking, the tools of monetary policy and how policy decisions are implemented, the interbank market, reserves and deposit creation by commercial banks, bonds and the yield curve, the expectations theory of long-term interest rates, risk and portfolio choice, banking and maturity transformation, bank runs.

Questions to address:

- How do central banks control interest rates?
- What information can we learn from the shape of the yield curve?
- What is the role of banks and why are they inherently fragile?
- How should the banking system be regulated?
- Would the monetary system work better if commercial banks were prevented from creating money by imposing 100% reserve requirements?
- Is it a good idea for central banks to set up new digital currencies?

Topic 8: Nominal rigidities and business cycles

Contents: Sticky prices, the New Keynesian model, the real effects of monetary policy, business cycles and the role of stabilization policy, demand and supply shocks, real business cycle theory, evidence on business-cycle fluctuations, coordination failure and multiple equilibria.

Questions to address:

- Why does economic activity fluctuate?
- What are the shocks that cause booms and recessions?
- Can and should policymakers seek to ameliorate business cycles?
- Can changes in confidence be the driving force of business cycles?

Topic 9: Inflation, expectations, and macroeconomic policy

Contents: Inflation and the Phillips curve, the role of expectations, costs of inflation, time inconsistency and the inflation bias, inflation targeting, aggregate demand multipliers and the effectiveness of fiscal policy, unconventional monetary policy at the interest-rate lower bound, quantitative easing and forward guidance.

Questions to address:

- Can a fiscal stimulus raise GDP by more than the extra government spending?
- Should central banks prioritize controlling inflation or focus on trying to stabilize fluctuations in real GDP?
- What options do central banks have when nominal interest rates fall to zero?
- What is forward guidance, and how effective is it as a monetary policy tool?
- Should inflation targeting be reformed, or abandoned and replaced by targets for the price level or nominal GDP?

Topic 10: International trade in goods and assets

Contents: The balance of payments, gains from trade in assets, sovereign default and limits on international lending, determinants of the current account, exchange rates and exchange-rate regimes, purchasing power parity, the terms of trade, uncovered interest parity, capital mobility and capital controls, the trilemma.

Questions to address:

- What are the causes of 'global imbalances'?
- Do government budget deficits cause current-account deficits?
- Are monetary and fiscal policy still effective in an open economy where capital can flow freely?
- Should exchange rates be fixed or left to float?
- What are the causes of currency crises and the collapse of fixed exchange-rate systems?