# Monetary Economics

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course is divided into two modules. The first module explores the contemporary theory of monetary policy, looking at a central bank's objectives, constraints and instruments, as well as the channels for the transmission of policy, both in the absence and presence of credit constraints. A specific emphasis is placed on the formation of expectations, the credibility of monetary policy, central bank independence, and a review and assessment of the European Central Bank's actions.

The second module supplies information about the trend of the international monetary system, the structure of the foreign-exchange market, macroeconomic relationships that are the basis of the main models for the determination of exchange rates as well as the technical aspects (instruments and strategies) of doing business in the markets. The course thus has the objective of blending theory with operational dynamics.

At the end of the course, students will be able to understand: 1) the behaviour of central banks, the motivations underlying these behaviours, the role of the different tools used and the potential effects of the policies adopted; 2) the functioning of the foreign exchange market, the role of the various operators, including central banks and governments, in addition to the functioning of the international monetary system and of the European economic and monetary union.

***COURSE CONTENT***

Module I

*1. Formation of expectations and macroeconomic results*

– Adaptive expectations: adjustments and systematic errors.

– Rational expectations: definitions and proprieties.

– Solution of models with rational expectations.

– Neutrality of monetary policy.

– Non-neutrality of monetary policy and spread-out contracts.

*2. The "standard" model for monetary policy*

– The IS-AS-MPR base model.

– From MPR to the interest rate rule*.*

– Optimal rule and Taylor rule.

– Timing inconsistency and inflationary bias.

– Interest-rate rules and deflation.

– Monetary policy in an open economy.

– Monetary/fiscal policy interaction in a closed and open economy.

– Monetary/fiscal policy interaction in monetary union.

* Interactions between monetary policy and macroprudential regulation

*3. Monetary policy operational rules*

– Demand and supply of bank reserves.

– Equilibrium of interbank market and liquidity shocks.

– Changing official rates.

– Non-conventional intervention.

Module 2

1. *Structure and evolution of the foreign exchange market*

*–* The BIS findings and analyses

*–* The structure of spot and forward exchange rates.

*–* The role of swaps, futures and options.

*–* The role of the main operators, financial centres and technology.

2. *Evolution of the monetary system*

*–* Anchor currencies and currency regimes in the 21stcentury

*–* The role of the dollar, the euro, the renminbi and other major currencies

*–* The new Bretton Wood

*–* As a settlement currency in international trade

*–* Asa trading currency on the financial markets

*–* As an international reserve instrument.

3. *The empirical evidence and dynamics of the foreign exchange markets*

*–* The volatility of the foreign exchange market in the 21stcentury.

*–* What we learnt from the main models

4. *The European experience in terms of the single currency*

– The economic theory of optimal currency areas.

*–* Costs and benefits of a common currency.

*–* Economic convergence

– The role of culture and institutions.

– Monetary and budgetary policies in monetary unions.

– How to complete a monetary union.

5. *Causes and consequences of currency and financial crises*

*–* The new banking and financial scenario

*–* Financial crises and systemic risk

*–* Distinction between solvency and liquidity crises

– Flight to safety/quality

*–* The role of unconventional monetary policies

6. *Islamic finance*

*–* Genesis and reasons for growth

*–* The Islamic bank

*–* The sukuk.

*–* Indices and funds

– Islamic insurance

7. *Populism*

*–* A reasonable definition

*–* Models of affirmation of populism in world history and geography

*–* Supply and demand

*–* Economic, social and political causes

*–* The role of the media

***READING LIST***

***I Module***

Compulsory readings

F.C. Bagliano, *Appunti su aspettative razionali e Nuova Macroeconomia Classica*, (Blackboard).

A. Boitani, Macroeconomia, Il Mulino, 2019 (chs. 16, 17).

P. Bofinger-E. Mayer, *Monetary and fiscal policy interaction in a closed economy,* (Blackboard).

P. Bofinger-E. Mayer, *Monetary and fiscal policy interaction in the Euro Area with different assumptions on the Phillips curve*, Open Economy Review (2007), 18: 291-305 (Blackboard).

A. Baglioni, *Le frontier della politica monetaria*, Hoepli, 2021 (cap. 2).

Suggested readings

Further reading list suggestions will be provided by the lecturers and during the course.

***Module II***

Compulsory readings

BIS, *Triennial Central Bank Survey*, Global Foreign Exchange Turnover in 2019.

A. Schrimpf-V. Sushko, *Sizing up global foreign exchange markets*, iBIS Quarterly Review, December 2019.

Ilzetzki-Reinhart-Rogof, *Exchange Arrangements Entering the 21stCentury: Which Anchor*

*Will Hold?* NBER February 2017.

Ilzetzki-Reinhart-Rogof, *Will the Secular Decline in Exchange Rate and Inflation Volatility Survive COVID-19? Brokooing Paper BPEA Conference Draft*s, September 24, 2020.

Alesina-Tabellini-Trebbi, *Is Europe an optimal political area? Brookings Papers*, March 2017

M. Brunnermeier-R. Reis, *A crash course on the euro crisis*, August 2019.

R. Hamaui-M. Mauri, *Economia e Finanza Islamica*, Il Mulino, 2009.

Suggested readings

Further reading list suggestions will be provided by the lecturers during the course.

***TEACHING METHOD***

The course, which is offered in two modules consisting of traditional lectures, is supplemented by certain assignments to train the student in analysing exchange rates and arbitrage and portfolio strategies. These assignments will be considered in the final grade.

The course also envisions some discussion and monitoring of the performance of the financial markets so as to provide the students with tools for interpreting key macroeconomic indicators and the main correlations that influence the trends of the international financial markets.

***ASSESSMENT METHOD AND CRITERIA***

At the end of the course there will be a final two-hour written examination on both modules of the course which will have to be taken *on the same examination date ('appello').* The exam aims to verify both students’ theoretical preparation and their practical skills (through quantitative exercises) concerning the topics examined in class. The first module carries a weight of 4/7; the second one carries a weight of 3/7. The exam is passed if the overall average is equal to or above 18/30, and if each module scores 16/30 at the least.

The assessment will be based on the relevance of the students’ answers, their appropriate use of scientific terminology, the well-argued structuring of the discourse, the ability to identify conceptual links in a concise manner and to solve analytically the problems posed.

***NOTES AND PREREQUISITES***

Students must have basic knowledge of microeconomics and macroeconomics acquired in a three-year degree, with particular reference to the following topics:

– static optimisation and consumer choice

– macroeconomic models for the long term

– macroeconomic models for the short term (income-expense, IS-RT, IS-RT-BP in an open economy)

– macroeconomic models for the medium term (Phillips curve boosted for expectations, AD-AS model with dynamic AS).

Whoever is not familiar with this subject matter should study it before starting the course.

Useful references are:K. Sydsǽter-P. Hammond,*Manuale di matematica per l'analisi economica e finanziaria,*Pearson, 2015, Chapters 8-11;A. Boitani,*Macroeconomia,* Il Mulino, 2019, Chapters 6-14; orO. Blanchard-A. Amighini-F. Giavazzi, *Macroeconomia*, Il Mulino, 2014 chapters. 2-9 e 17-20.

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching will be carried out following procedures that will be promptly notified to students.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.