

Post-Graduate Course, October 2020 – June 2021

GLOBAL CRISIS MANAGEMENT: CENTRAL BANKING, FINANCIAL MARKETS, ENERGY SUPPLY AND HEALTH*

Basic information:

Credits: 30.

Teaching Modality: Attendance (Virtual if needed).

**Centre: Faculty of Economics, Universitat de Barcelona.
(Av. Diagonal 690-696, Barcelona).**

Places: 35 (20 minimum).

Language: English.

Fee per credit: 91,67 euros.

Director: Ramon Tremosa.

Coordinators: Emili Valdero & Eduard Gracia

Information and official inscriptions at rtremosa@ub.edu

**** Pending of final ratification by the UB at mid-June.***

For the second time in 10 years, the world is once again suffering a very strong crisis. In 2008 the financial crisis was originated in the US, but it took two years to affect the whole world, becoming a very strong banking and economic crisis.

In the first months of 2020 we have experienced a very intense economic collapse, economic, never seen before in contemporary times. A pandemic crisis caused by a virus spread in less than 3 months to all continents of the world, forcing the closure of all non-essential services for another three months in a vast majority of countries. The downturn as reflected in all general activity indicators is record-marking, surpassing in speed and magnitude those of the Great Depression of the 1930s.

As happened 10 years ago, central banks have once again saved the world from the total and absolute collapse of the financial, stock market and banking markets, providing huge amounts of liquidity to the economy. Central banks have avoided chaos and collapse... but there will be secondary effects?

Global crises spring for many sources: financial bubbles and crashes, energy prices swings, contagious diseases, geopolitics, and armed conflicts... They are all complex, they can all spread at bushfire speed, and fast, sharp, well-informed action often marks the difference between minor bump and major catastrophe.

This postgraduate course aims therefore not only to study how central banks have acted to confront these crises but also, to deep-dive into the dynamics of global financial, foreign exchange and energy markets, as well as health economics, in order to understand the complex global setting where future crisis will unfold.

MODULE 1: INSTITUTIONAL ASPECTES OF ECONOMIC INTEGRATION PROCESSES

Comprehensive study of the European Union, analysing the main achievements of its economic integration (internal market and the currency union) and the main political failures (Brexit). Also, the module analyses other international economic integration experiences.

COURSE 1.1: European Union and Institutional Architecture

Lead Lecturer: Ramon Tremosa. Credits: 2.

Core topics:

- 1.- General introduction and history of the European institutions. The four freedoms.
- 2.- The European Council, the European Commission, and the European Parliament. Functioning of the European legislative process. Trialogues and transposition of European legislation to Member States.
- 3.- The European Court of Justice and the Council of Europe.
- 4.- The Single Market as the engine of European economic integration.
- 5.- Brexit: causes and consequences. Models of differentiated relations with the EU (Norway, Switzerland, Canada and Turkey).
- 6.- EU Trade Policy: Free Trade Agreements (FTA).
- 7.- The Transport Policy. The Ports potential of the Western Mediterranean Sea and The European network of Rail Freight Transport priorities (TEN-T). Case: the Mediterranean corridor. European airspace. The European Ports Regulation.
- 8.- The Common Environmental Policy. The Common Agricultural Policy (CAP).
- 9.- The EU Research & Development Policy. The EU Regional Policy.
- 10.- The Common Competition Policy (Google and Microsoft cases). Europe, a digital US and China colony?
- 11.- The Financial Services Action Plan of the European Commission

COURSE 1.2: Other International Economic Integration Experiences

Lead Lecturer: Ramon Tremosa & Emili Valdero. Credits: 2.

Core topics:

- 1.- The European Free Trade Association (EFTA).
- 2.- The North American Free Trade Agreement (NAFTA).
- 3.- The Common Market of the Southern Cone (Mercosur).
- 4.- The Central American Free Trade Agreement (CAFTA-DR - Dominican Republic-Central American Free Trade Agreement). The Caribbean Community (CARICOM - Caribbean Community).
- 5.- The Free Trade Area of the Association of Southeast Asian Nations (AFTA - Association of Southeast Asian Nations ASEAN Free Trade Agreement).
- 6.- The Eurasian Economic Union (EAEU). The Gulf Cooperation Council (GCC).
- 7.- The Pacific Agreement on Closer Economic Relations (PACER).
- 8.- The African Financial Community (CFA), the Economic and Monetary Community of Central Africa (CEMAC - Central African Economic and Monetary Community) and the Economic and Monetary Union of West Africa (WAEMU - West African Economic and Monetary Union).
- 9.- The Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA).

MODULE 2: FISCAL AND MONETARY POLICY IN INTEGRATED ECONOMIES

This module aims to deepen the functioning of the European Union, in which the centralized monetary policy of the euro coexists with the decentralized fiscal policies of the EU Member States. Economic globalization, global surplus savings and super-expansive economic policies will be studied in the light of the considerable impact of the technological and digital revolution of the 21st century.

The ECB response to the subprime crisis (2008-2010), the sovereign crisis (2011-2012) and the coronavirus crisis (2020) will be at the centre of this module.

The exchange rate in integrated economies will also be studied, analysing the different existing systems and their management by the monetary authority, as well as the dynamics and effects of speculative attacks and currency crises and the role played by central banks.

COURSE 2.1: Fiscal and Monetary Policy in Europe

Lecturer: Ramon Tremosa. Credits: 4.

Core topics:

1. The Theory of Optimal Monetary Areas: micro and macroeconomic convergence in the EU. Comparison and parallels with the US.
2. The ECB: history and evolution of the euro and the ECB from the EMS (Case: George Soros against the pound sterling).
- 3.- The European Banking Union. The ECB's Financial Supervision (Popular Cases and Monte dei Paschi). Comparison and parallels with the US
- 4.- The euro crisis. European economic governance. The European Minimum Wage.
- 5.- The ECB response to the subprime crisis (2008-2010), the sovereign crisis (2011-2012) and the coronavirus crisis (2020)
- 6.- Monetary policy in the EU and in the United Kingdom. Comparison with the monetary policy of the USA, China and Japan.
- 7- Zero interest rate and massive debt purchases (Quantitative Easing, QE): Side effects of QE (real and financial bubbles, social inequality).
- 8.- Cryptocurrencies and the future of the fiat currency.

COURSE 2.2: Economic Integration and Exchange Rate Systems

Lecturer: Emili Valdero. Credits: 4.

Core topics:

1.- **The Foreign Exchange Market (Forex)**. Exchange rate definition. ISO currency codes. Nominal, real and effective exchange rates. Characteristics and participants of the Forex. Arbitrage in the Forex: The carry trade. The demand and supply of foreign currency. Determinants of foreign currency demand and supply: fundamentals, expectations and risk (foreign exchange, interest rates, credit, sovereign). Difference between spot market and forward market. Currency derivatives: futures, options and swaps. Hedging versus speculation in the Forex. The Interaction of hedgers, arbitrageurs and speculators. Exchange rate systems: fixed versus flexible exchange rates. The AREAER classification of exchange rate systems: De jure and de facto exchange rate arrangements. Exchange rate structure: unitary, dual or multiple foreign-exchange rate system.

2.- **The Balance of payments.** Collection, reporting and presentation of the balance of payments statistics. Balance of payments accounting and accounts. Recording of transactions in the balance of payments. Alternative concepts of balance of payments surplus and deficits. The balance of payments and foreign exchange reserves.

3.- **Flexible or free floating exchange rate systems.** Exchange rate volatility. Free floating markets: EURO, United States dollar (USD), British pound (GBP), Japanese yen (JPY).

4.-**Managed floating exchange rate systems.** Central bank monitoring of the target exchange rate. The cases of Argentina, Brazil, Czech Republic, Croatia, Hungary, India, Israel, Romania, Thailand, Turkey, Switzerland and South Africa.

5.- **The central banks and the exchange rate.** Exchange rate agreements: De jure and de facto. The foreign exchange interbank market. Central banks monetary policy framework: exchange rate anchor, monetary aggregate target and inflation-targeting. Central bank interventions in the Forex: direct and indirect. The interbank interest rate. Foreign exchange market restrictions: imports of goods and services, profits and dividends, loans, bank transfers, capital controls.

6.- **Fixed exchange rate systems: Soft pegs-Part I**

Anchor currency and nominal exchange rate target. The basket of currencies anchor system. Pegged exchange rates within horizontal bands. The cases of Singapore, Morocco, the Gulf Cooperation Council (GCC), the Central African Economic and Monetary Community (CEMAC) and the West African Economic and Monetary Union (WAEMU). The European Exchange Rate Mechanism II (ERM II): The case of Denmark.

7.- **Fixed exchange rate systems: Soft pegs-Part II**

The crawling peg system. The crawl rate and the crawling bands. The cases of China, Costa Rica and Tunisia.

8.- **Fixed exchange rate systems: Hard pegs-Part I**

Currency Board Arrangements (CBA). Design and implementation of the CBA. Advantages and disadvantages of the CBA. Conditions that must be satisfied in order to be able to implement a CBA. The cases of Bulgaria, Hong Kong and Bermuda.

9.- **Fixed exchange rate systems: Hard pegs-Part II**

Full Currency Substitution (FCS): Exchange arrangements with no separate legal tender. Economic implications of FCS. Dollarization: The cases of Panama, Ecuador and El Salvador. Euroization: The cases of Montenegro and Kosovo.

10.- **Speculative attacks.** The Exchange Market Pressure Index (EMPI). Participants in a speculative attack. Hedge funds. The central bank's response. The contagion effect. Reverse speculative attacks: The Case of the Swiss Franc.

11.- **Monetary unions outside the EURO:** The East Caribbean dollar of the Eastern Caribbean Currency Union (ECCU) and the CFA franc of the Central African Economic and Monetary Community (CEMAC) and the West African Economic and Monetary Union (WAEMU).

MODULE 3: GLOBALIZATION AND FINANCIAL

INTEGRATION: EVIDENCE AND IMPACTS

This module analyses the processes of financial globalization in the world economy and how economic integration affects the financial and capital markets: banking, stock markets, debt. The effects of direct investment in integrated economies and the role played by multinational companies, investment funds, international banking and credit rating agencies will also be discussed, as well as the international regulation of capital flows and the disclosure of ownership of public companies. Other aspects of global financial integration such as commercial financing and cross-listing will be analysed as well. Finally, the global financial crises will be analysed in depth, their typologies, causes and effects, and the contagion effect, emphasizing the case study of the most relevant global financial crises of the last 25 years.

COURSE 3.1: The Globalization of Financial Markets

Lecturer: Emili Valdero and other lecturers invited for specific topics. Credits: 3.

Core topics:

- 1.- **The liberalization of financial markets:** private banking, stock market, debt. Measurements of capital and financial current account openness.
- 2.- **International capital movements.** Debt flows, equity flows, direct investment, migrant remittances.
- 3.- **International investment funds.** The volatility of capital flows. Capital raisings. International cross-listings.
- 4.- **International debt markets.** Private debt and public debt. Sovereign default.
- 5.- **Foreign bank participation in developing countries.** The drivers of foreign bank entry. The consequences of foreign bank entry. Trends and regional patterns for emerging economies.
- 6.- **Commercial financing.** Global risks and patterns of commercial financing. Relationship Between bank credit and trade credit.
- 7.- **Credit rating agencies.** The Big Three: Moody's Investors Service, Standard & Poor's (S&P) and Fitch Ratings. Business models of credit rating agencies. Ratings in the bond market. Ratings in structured finance: asset-backed securities (ABS), residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), collateralized debt obligations (CDOs), synthetic CDOs and derivatives. Sovereign debt ratings: country risk.
- 8.- **Capital Market Integration.** Benefits of financial globalization. Foreign direct investment, growth and international technology transfer. Role of multinational corporations in financial globalization.

9.- **International regulation of capital flows.** Capital Flow Measures (CFM), the International Monetary Fund's (IMF) Articles, international investment agreements (IIAs) and the World Trade Organization (WTO) regime. Bilateral Investment Treaties. Conflict management of CFM rules.

10.- **Disclosure of ownership and public companies.** Corporate governance failure: The case of Enron and Parmalat. Related party transactions. Control of beneficial ownership.

11.- **Financial globalization and monetary policy.** Globalization and long-term interest rates. Exchange rate regimes and short-term interest rates. The financial crisis, liquidity, and the credit channel.

12.- **Financial dollarization.** Determinants of financial dollarization: the price risk paradigm, the credit risk paradigm, the risk-shifting paradigm, the financial environment paradigm. Structural dollarization.

13.- **Financial integration in Europe.** Financial integration and financial development. How integrated are European financial markets? Money, bond, stock, and credit European markets. Prospects for security and credit markets integration.

14.- **China's financial globalization.** China's financial opening. China's current account and saving behaviour in cross-country context. Explanations for China's high savings rate. Financial development and corporate finance in China.

COURSE 3.2: Global Financial Crises

Lecturer: Emili Valdero. Credits: 3.

Core topics:

1.- **Financial crises in the era of globalization.** Types of financial crises: banking crises, currency crises, debt crises, speculative bubbles burst. Causes, evolution and mutations of financial crises. Sovereign risk, credit rating agencies and the confidence of international investors. Structure and function of the International Monetary Fund. The IMF and global financial crises.

2.- **Banking crises.** Causes and effects of banking crises. Global banking regulation and supervision after the crisis

3.- **Currency crises.** Causes and effects of currency crises. Currency crisis models: 1st generation, 2nd generation and 3rd generation. The 1992-93 European Exchange Rate Mechanism (ERM) crisis.

4.- **Debt crises.** Causes and effects of debt crises. Public debt and private debt. Sovereign default and private default. External debt and exchange rate.

5.- **Early Warning Indicators (EWI) for banking, debt and currency crises.**

6.- **Speculative bubbles burst crises.** Bubbles in the stock and real estate markets. Causes and effects of speculative bubbles burst crises.

7.- **Predictive models of financial crises.** Indicators of financial vulnerability.

8.-**The contagion effect of financial crises.** Contagion by commercial integration and contagion by financial integration. The contagion effects of financial crisis on stock markets.

9.- **USA financial crises case studies:** The USA stock market crisis of 1987. The subprime mortgage crisis of 2007-2008.

10.- **Europe financial crises case studies:** The Swedish banking crisis (1991-1992), the Greek debt crisis (2009) and its extension to other countries in the eurozone. ECB intervention and financial bailouts.

11.- **Latin America financial crises case studies:** The Mexican crisis (1994-1995), the crisis of Brazil (1999) and the default of Argentina (2001).

12.- **Asian financial crises case studies:** The Southeast Asian crisis of 1997.

13.- **The 1998 Russian financial crisis.**

14.- **The global financial crisis of 2008-2012.** Lessons and implications for economic policy.

15.- **Health crises and their economic and financial effects.** The economic and financial impact of COVID-19 pandemic crisis. Asymmetric responses and global effects.

MODULE 4: GLOBAL ENERGY ECONOMICS, MARKETS & HEALTH

COURSE 4.1: Energy Markets

Lead Lecturer: Eduard Gracia & Bernat Rofes. Credits: 3.

Comprehensive study of global energy markets and dynamics along their entire value chain and their relevance to Europe's economy, both from the perspective of its integration with worldwide markets (such as oil and gas) and from that of the activities of more Europe-specific ones (e.g. electric power), including the impact of new technologies as well as that of policies and regulation.

Core topics:

1. Introduction to global and regional energy markets
2. Global energy demand: markets, technology, regulation and business cycle impact

3. The end-to-end, global energy/hydrocarbon value chain
4. Global players: national oil companies, super-majors and oil & gas independents
5. Upstream: exploration and production of fossil fuels
6. The commodity super-cycle: investment, innovation and long-run price swings
7. Short-term price dynamics: trading, inventories, speculation and risk management
8. Oligopolies and stabilizers: OPEC, strategic reserves and the impact of fracking
9. Hydrocarbon geopolitics: energy security, hydrocarbon rents and conflict
10. Downstream: transportation, refining and marketing of hydrocarbon products
11. The role of the petrochemical industry
12. Electric power and gas utilities: energy generation, transmission and marketing
13. European power market players: national oligopolies, big operators and retailers
14. Traditional energy generation: hydraulic, thermal (oil, gas, coal) and nuclear
15. Alternative energies: wind, solar/photovoltaic and others
16. The liberalized electric market: trading, daily demand and merit order
17. Environmental regulation, carbon credits and clean technologies
18. Foreseeable trends and future scenarios

COURSE 4.2: Health Economics
Lead Lecturer: Joan Gil. Credits: 2.

Applying the concepts and models of health economics to understand the impact of energy consumption on population health and the environment as well as, more generally, of other global factors such as infectious disease pandemics, as well as the public policies that can be adopted in each case to minimize the negative effects of these phenomena on human health.

Core topics:

1. Introduction to health economics
2. Measuring health
3. Health systems around the world
4. Health spending and its drivers
5. Health and the business cycle
6. The drivers of health; the environment
7. Environmental pollution, climate change and health
8. Energy consumption and its health impact
9. Pandemics and other global health challenges

Ramon Tremosa

- Lecturer of the Department of Economics Theory at the University of Barcelona since 1995. He wrote his PhD on how monetary policy impacts on the business benefits of Catalan manufacturing industry. He has published books and academic articles on monetary policy, regional economics, and fiscal federalism
- He was a Member of the European Parliament between 2009 and 2019, being full member of the Committees on Economy and Finance, International Trade and Transport and Tourism. He was also full member of the US and Israel EP parliamentary delegations.
- He was one of the rapporteurs for the European Financial Supervision (2010), the European Central Bank's annual reports (2012 and 2016) and the Annual Competition Reports (2013 and 2017), being active in the debates on the Google case. He also took part in the debates on the Mediterranean corridor (TEN-T) and the reforms of the Common Agricultural Policy.
- From 2017 to 2019 he was Coordinator in the Economic Committee of the Liberal Group, which allowed him to visit different central banks around the world and to be present in many negotiations in this area.
- His main important books are *Què fan els bancs centrals* (2019), *Why Europe Fails* (2017), *Catalonia, an Emerging Economy* (2010) and *Catalunya serà logística o no serà* (2007).

Emili Valdero

- Bachelor's-degree in Economic and Business Sciences (University of Barcelona, 1989).
- Postgraduate in Applied Statistics (Imperial College of Science and Technology, London, 1994).
- Bachelor's-degree in Statistics (University of Barcelona, 1995).
- PhD in Economics (University of Barcelona, 1998).
- Tenured lecturer of the Department of Economic, Financial and Actuarial Mathematics at the University of Barcelona since 2001.
- He worked at the Research Department of CaixaBank Research, the economic research and analysis division of CaixaBank, during the period 1990-1993, focusing especially on foreign exchange markets and international finance markets. He

elaborated forecasts for the Forex market and made many research reports about the crisis in the European Monetary System (EMS) of 1992-1993.

- From December 2006 to December 2008 he was Secretary of Commerce and Tourism of the Catalan Government.

Eduard Gracia

- Eduard has more than 25 years of strategy and management consulting experience, primarily in energy and chemicals. He has led strategy projects as well as large enterprise transformation efforts for oil & gas super-majors, national oil companies, chemicals leaders and utilities across Europe, the Americas, Asia, Middle East and North Africa.
- He has authored many business viewpoints that appeared at professional magazines as well as a number of academic papers published at peer-reviewed journals and also a management book (*The Fable of the Sharks: Power and Politics in Today's Business Organisations*) awarded an accessit at the 2006 Everis Foundation Business Essay Awards event.
- Eduard's academic background includes a bachelor's degree in economics at the University of Barcelona as well as a full-time MBA at IESE Business School. Since February 2020 he is a Lecturer of International Economics at the University of Barcelona.