

12M015

3 ECTS

## Regulation of Financial Markets

### Overview and objectives

This course will focus on the economic principles underlying the regulation and supervision of the financial sector and its evolution over time. It will analyze in particular those elements of financial markets supervision that set it aside from other regulated sectors in the economy, and which are directly associated with the crucial role of the financial sector, in particular banking, in the organization of human life and relationships.

We will examine in some detail the different pillars of financial sector regulation: prudential, conduct of business rules, markets infra-structure, corporate governance, and financial stability, and their different translation into the regulation and supervision of different pieces of the financial markets structure: banking, insurance, securities and financial products, derivatives and equity markets, etc.

Financial Stability and Macroeconomic Policy stand nowadays in the core and center of the work and concerns of regulators, supervisors and politicians around the world, including all the major multilateral international organizations and, thus, we will devote one whole section of the course to the associated issues which, in turn, permeate most of the parts of this syllabus

While recognizing that prudential regulation and supervision (or, more generally, all those elements designed to prevent or contain the failure of financial entities and the financial system) constitute always the core of any financial markets regulation program, we will in this course devote also special attention to the economic foundations of conduct of business rules (including but not limited to disclosure, transparency, know-your-client rules, etc.

Particular attention will be devoted to a number of issues raised in the last decade of the 20th century extending to the present days. We will analyze the roots of the deep de-regulatory process undergone throughout that period along with the generalized de-regulation of the economy, its effects, and the movement towards re-regulation and enhanced supervision underway at present.

We will address some current topics and challenges in regulation which have captured the public eye in the recent years due to the social impact of the issues underlying them: role of rating agencies and regulation of their activity; benchmarks (in particular interest rates), their use and how to avoid their manipulation; the impact of some financial products designed to mitigate risk (in particular default risk) and its regulation, financial entities (i.e. banks' resolution and associated bail-in products and procedures with some examples of real recent bank crisis; and the relationships and interferences between the economic and political sphere and the degree of control of financial activity, among others.

Finally we will consider some of the newest developments in the financial system (alternative payment systems or methods as bitcoins, or new forms of fund-raising as crowdfunding), FinTech and RegTech, and explore the ways in which all these new developments have the potential to change the world of financial intermediation for good, and will explore whether there is any need for specific regulation or supervision, if any.

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### Methodology

There will be ten two-hour lectures where we will discuss the actual financial market regulation that addresses market failures or inefficiencies. Aside from more conventional issues in financial regulation, special attention will be devoted to those aspects of financial markets that have an impact on economic and financial stability and the mechanisms currently used or devised (macroprudential policies) to achieve or restore stability. Lectures will consist of a brief exposition of the topics followed by discussion of the papers covering them. Student participation is especially encouraged.

Students are expected to present cases of specific financial markets regulation, including examples of inadequate regulation or cases in which the regulation did not achieve its goal or prompted adverse reactions. They will also discuss a paper of their choice on financial regulation or, alternatively, will undertake a course Project in groups of no more than 3 persons, to be presented to the full class.

### Evaluation criteria

To pass the course, students must earn at least 50 points out of 100, according to the following distribution:

Class participation: 10 points.

Exam: 50 points (a minimum of 35 is required to pass the course).

Presentation: 40 points: The presentation will be graded on two criteria: Overall quality of the paper (content and development) and actual quality of presentation in terms of clarity and ease of presentation.

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### Course Syllabus

#### 1. Principles, history and goals of financial regulation

##### a. Economic foundations of regulation

Economic foundations of regulation and, in particular, financial regulation. Imperfections of and/or exceptions from the model of perfect competition when applied to the financial system (Asymmetric information -adverse selection and moral hazard-, Non appropriability of information, Public goods, Externalities, Other objectives of policy.

##### b. Brief history of financial regulation

Introduction: Some specific regulations and measures adopted throughout history (deposit guarantee, lender of last resort, portfolio restrictions and geographic limitations, limits on interest rates, etc.) as a consequence of the abovementioned imperfections and exceptions

##### c. The overarching goals of financial regulation

- Efficiency in market organization (competition policy)
- Integrity in financial markets transactions (conduct of business rules) and in the relationships between financial entities and their clients and among themselves.
- Solvency of the financial system (micro-prudential supervision applied to individual financial entities)
- Monitoring the stability of the financial system (macro-prudential supervision, applied to the so-called systemic entities", markets, trading platforms and payment systems, etc.)
- Integrity and safety of the trading and post-trading infra-structures
- Money policy and macroeconomic stability

#### 2. Banking regulation

Solvency and liquidity of credit institutions as the main concern of financial authorities.

Main objective. Avoid or minimize the occurrence of bank runs and other situations that might de-stabilize the financial system and the economy at large

- Protective measures (ex –post):
  - a. Deposit guarantee

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- b. Lender of last resort
- c. other
- Preventive measures (ex- ante):
  - a. Entry barriers, restrictions on activity and geographic limitations
  - b. Interest rate restrictions
  - c. Licensing and suitability checks
  - d. Prudential regulation
- Prudential regulation: Capital adequacy rules as the safeguard against potential losses and as a form to limit the excessive assumption of risk by bank managers
  - a. Regulatory capital for credit risk, market risk, operational risk, reputational risk and others.
  - b. Liquidity and leverage ratios
  - c. Asset eligibility in computing regulatory capital
  - d. Bank equity as a guarantee of prudence. Requirements on the ratio debt/equity to control banks' risk.
  - e.

Basel capital agreements: from the minimum capital standards to face credit risk (Basel I) to a general and overarching framework of prudential regulation for the overall banking system (Basel III)

- a. Minimum capital standard for counterparty or credit risk (standard model)
- b. Market risk ratio, and Operational risk ratio
- c. The use of internal Value-at-risk models to assess risk and the capital requirements by the financial entities (Basel II)
- d. Liquidity and leverage ratios
- e. Introduction of counter-cyclical measures
- f. The 3 Pillars of Basel:
  - 1. Pillar I: Minimum capital requirements, liquidity and leverage ratios
  - 2. Pillar II: Supervisory review process, remuneration and governance policies, counter-cyclical measures and stress testing
  - 3. Pillar III: Market discipline
- g. The review and hardening of Basel capital requirements as a consequence of the 2007-2009 financial crisis

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- h. Basel III implementation calendar
- i. Macroeconomic and financial impact of Basel capital agreements
- j. Adoption of Basel Agreements by the European Union

### 3. Securities markets regulation

In comparison to the banking model and its regulation, the key to the appropriate performance of securities markets and their regulation lies on the availability of complete and verifiable information (disclosure), the transparency in the operations and the strict observance of the conduct of business rules amongst market agents and between them and their clients.

The regulation applicable to the securities markets is, to a great extent, applicable also to banks in their function as market agents (issuers, intermediaries, operators of trading systems, depository institutions, etc.). This is particularly relevant in continental Europe, where traditionally banks have played a large part of the role that markets have played in countries such as the UK or the USA.

- Primary markets
  - a. Regulation of information contained in prospectuses, accounting standards, relevant information, shareholding, etc.
  - b. Debt issues and complex products. Examples (CDS, structured products, swaps, complex derivatives, ...)
  - c. Credit rating agencies regulation
  - d. Regulations applicable to managers and administrators of publicly listed companies
  - e. Corporate governance
- Secondary markets
  - a. Regulation of systems and trading mechanisms, exchanges, derivatives exchanges, multilateral trading matching systems, etc.
  - b. Self-regulation
  - c. Prevention and detection of market abuse and price manipulation
  - d. Insider trading and other financial markets abuses (front running, etc.)
  - e. Market infra-structure regulation

#### Investment Services Firms

- a. Regulation of conduct with the clients and in the markets
- b. Front-running y and client discrimination

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- c. Review of practices designed to alter the orderly functioning of markets
- d. Prudential measures applied to financial intermediaries, segregation of clients assets
- e. „Know your client” rules, assessment of suitability and convenience of investments offered to clients, fair treatment, disclosure of information provided to clients, advisory services, ...
- f. Implications of the various MIFID and MAD Directives in the activity of market intermediaries.

Collective Investment Vehicles:

- a) UCITS regulation and its translation into the Spanish regulation on collective investment vehicles and institutions
- b) Investment Funds and ETFs

Alternative Investment vehicles: Hedge funds, Venture Capital etc.

Regulation of Clearing and Settlement systems, central depository and registry, repositories, etc. Their role in systemic risk control and containment.

### 4. Financial Stability and Macroprudential Policy

Context and relevance of financial stability and macroprudential policy:

- Concept of financial stability
- Macroprudential policy
- Examples of crisis related to systemic risk

Central banks in the origin of the tasks to identify and follow systemic crisis

- Entity size: key to systemic risk
- Macroprudential tools: capital requirements, countercyclical provisions, LTV limits etc.

The financial crisis changes perception of systemic risk and broadens the spectrum of regulators and supervisors to play a relevant role

- Sources of systemic risk: interconnectedness, substitution degree, concentration, lack of transparency, hedging, complexity,
- The role of confidence
- New definitions of financial stability
- New principles of IOSCO
- Shadow banking
- Money market funds and fixed income funds
- Financial intermediaries
- Securitizations

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Financial stability at the international level

- FSB
- ESRB
- IOSCO / ESMA
- Architecture of macroprudential policy in particular countries or jurisdictions
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### 5. MIFID II Directive and application

MIFID II and sales of financial products

- a) General review of the requirements on commercialization of financial products derived from MIFID II and its transposition into Spanish regulation. Assessment of suitability and convenience: procedures, formats and interaction with clients.
- b) Follow up and monitoring on a continuous basis of the suitability of clients investments to their investment profile
- c) Training, knowledge and competence of the employees of the investment firms, in particular those providing financial advice and information on financial products. Evaluation of this competence by the firm and the authority
- d) Information to be made available and criteria for the commercialization of complex products. Overview of the different criteria and channels, voluntary and compulsory, made available by the regulatory authorities.
- e) Disclosures relative to retail financial products linked to or based on insurance products (PRIIPS)
- f) Responsibility of Investment services firms in the sales of complex products and, in particular, contracts for differences and products subject to the banking resolution regime (BRRD)
- g) UCITS commercialization and other products beyond EU Passport
- h) Remuneration policies for sales personnel at the Investment services firms. Conflicts of interest or perverse incentives in the remuneration.
- i) The crucial and independent role of Compliance in the investment Services firms

MIFID II and the markets and their agents

- a) Management and corporate governance
- b) Organization requirements and conduct of business rules
- c) Approval process for financial instruments
- d) Trade and operations registry
- e) Pre and post-trade transparency

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- f) Algorithmic trade (e.g. high frequency trading)
- g) Market structure
- h) Organized trading systems
- i) Creation and regulation of new services providers: data provision, authorized publication agents, consolidated information providers, etc.
- j) Control of positions in commodities derivatives

### 6. Discussion on specific topics on market and banking regulation

- Regulation of Credit Rating Agencies, Manipulation of interest rates, indices and other benchmarks in international markets. etc.
- FinTech, DLT, Crowdfunding
- Bank resolution regimes and associated bail-in products
- The future of financial intermediation and regulation



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### Bibliography and supporting reading materials

- Frederic S. Mishkin: The Economics of Money, Banking and Financial Markets. 10th edition (2013). Pearson (Chapters 2 and 12) (LIBRO DE TEXTO)
- Randall Dodd: The economic rationale for Financial Market Regulation. December 2002. Financial Policy Forum, Derivatives Study Center
- Dirk Heremans, Alessio Paces: Regulation of Banking and Financial Markets. April 2011, Rotterdam Institute of Law and Economics
- Martin Hellwig: Capital regulation after the crisis: Business as usual. 2010. Max Planck Institute
- Rym Ayadi: On Basel Regulation and banks Incentives, 2012. New Paradigms in Banking, Financial Markets and Regulation?, SUERF - The European Money and Finance Forum
- Matthew Sherman: A short history of Financial Deregulation in the United States. July 2009. Center for Economic and Policy Research, Washington D.C
- IOSCO: Credit Rating Agencies: Internal controls designed to ensure the Integrity of the credit rating process and procedures to manage conflicts of interest. 2012. ([www.iosco.org](http://www.iosco.org) )
- ICE LIBOR: Calculating ICE LIBOR. <https://www.theice.com/iba/libor>
- Roger Myerson: Rethinking the principles of bank regulations: A review of Admati and Hellwig banker new clothes”.
- The role of credit rating agencies in structured finance markets. OICV-IOSCO, Final Report, May 2008
- IMF-BIS-FBS (2009): “Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations”. International Monetary Fund, Bank for International Settlements and Financial Stability Board.
- European Central Bank (2011). “Special Feature C: Systemic risk methodologies”, Financial Stability Review, June, pp. 141-148.
- IOSCO (2011). “Mitigating Systemic Risk: A Role for Securities Regulators”. Discussion paper or01/11.

Selected papers from:

- ✓ IOSCO: ([www.iosco.org](http://www.iosco.org) )
- ✓ ESMA: ([www.esma.europa.eu](http://www.esma.europa.eu) )
- ✓ Basel Committee on Banking Supervision ([www.bis.org](http://www.bis.org))
- ✓ European Banking Authority ([www.eba.europa.eu](http://www.eba.europa.eu))
- ✓ Financial Stability Board ([www.fsb.org](http://www.fsb.org) )

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### Bio of Professor

Eudald Canadell is Director of Research and Statistics at the CNMV (Comisión Nacional del Mercado de Valores), the Spanish financial markets regulatory and supervisory agency. He has spent most of his career working in the international regulatory and financial markets field. He holds a degree in Economics from the University of Barcelona and an MSc in Economics from the University of Minnesota, where he focused on Financial Economics and Econometrics, and taught (T.A) Managerial Economics and Microeconomics. He has also completed advanced management courses at several business schools including the INSEAD (AMP 2008).

Professor Canadell had been at an early stage of his professional career a director at the CNMV, where he was responsible for economic analysis and international relations, having intervened in the negotiation of several European directives in finance. Subsequently he was appointed Secretary General of IOSCO, a position he held for four years. During his tenure IOSCO developed and approved, among other policies, the first Principles for the Regulation and Supervision of Securities Markets (1998), adopted subsequently by the IMF to assess the quality of regulatory and supervisory systems around the world.

Prof. Canadell has also served as a senior executive at financial markets and international financial companies, including the Financial Derivatives Exchange in Spain (MEFF), and Standard & Poor's Index Services, where he held the position of Managing Director for Europe during 6 years. Subsequently he worked on compliance related matters at a Spanish major bank, and as a senior vice-president at the consultancy Company Compass Lexecon, immediately before re-joining the CNMV.