

## Advanced topics in macroeconomics

### Course mnemonic

ECON-S461

### ECTS credits

5 credits

### Language(s) of instruction

English

### Course period

Second term

### Campus

Solbosch

## Course content

The course chronologically follows the sequence of the GFC. It will start with the **origins of the GFC** in the U.S. The U.S. subprime crisis that began in the summer of 2007 was triggered by deteriorating quality of U.S. subprime mortgages. This rapidly propagated across different asset classes and financial markets. The course will empirically examine the linkages between market and funding liquidity pressures, as well as their interaction with solvency issues surrounding key financial institutions during the 2007 subprime crisis.

The course will then cover some of the **policy responses to address the fallout from the GFC**. In particular, it will empirically examine the effectiveness of central bank interventions during the crisis period by focusing on the Federal Reserve (Fed) and the European Central Bank (ECB).

After the crisis origins and policy responses during the GFC, the course will then focus on **financial spillovers and contagion**, by drawing on the wide empirical academic literature. For instance, the course will look at the financial spillovers to EMs by examining potential financial linkages between liquidity and bank solvency measures in advanced economies and EM bond and stock markets. It will also examine several key global market conditions, such as a proxy for market uncertainty and measures of interbank funding stress, to assess financial volatility and the likelihood of crisis.

The course will then cover some (geographical) **case studies during and after the GFC**. For instance, using an event study methodology, it will examine financial stability issues that arose from the increased presence of sovereign wealth funds (SWFs) in global financial markets by assessing whether and how stock markets react to the announcements of investments and divestments to firms by SWFs.

The course will also empirically examine issues related to **debt sustainability and sovereign debt restructuring**, both topics that have prominently come to the forefront in recent years. Specifically, GARCH and panel data methods will be employed to gauge the cost of sovereign borrowing as well as risks of a sovereign debt restructuring. The course will also analyse the links

between debt sustainability and fiscal policy with the use of fiscal reaction functions.

## Objectives (and/or specific learning outcomes)

The course will focus on empirical research topics related to the Global Financial Crisis (GFC), which has been a watershed event not only for the United States and many advanced economies but also emerging markets (EM) around the world. The course will cover a wide range of issues from the origins of the financial crisis, the policy response, financial spillovers and contagion, case studies, debt sustainability and sovereign debt restructuring. Diverse empirical methodologies will be discussed, ranging from panel data methods to GARCH and Markov-Switching models and event study regressions.

## Teaching method and learning activities

The course, structured over 12 two hour seminar style sessions (Wednesday's from 5-7pm), will use as the starting point my recent e-book *Essays on the Global Financial Crisis* [[https://www.elibrary.imf.org/fileasset/misc/excerpts/essays\\_global\\_financial\\_crisis.pdf](https://www.elibrary.imf.org/fileasset/misc/excerpts/essays_global_financial_crisis.pdf)], published by the International Monetary Fund (IMF). The course will also give a selective technical overview of key research topics on the GFC, which should be seen as complementary. Importantly, the course will have a predominantly empirical focus by presenting the different methodologies used including panel data methods, GARCH and Markov-Switching models.

## Contribution to the teaching profile

The course will equip students with the applied research frontier knowledge related to the GFC. It will help course participants gain a thorough and critical understanding of the empirical and statistical tools used on various applied topics on the GFC. The eventual objective for the research students is to be able to initiate and carry out independent research. Therefore, the course will enable the participants to *first*, critically assess the quality and substance of research done by others in the GFC sphere (including by presenting an academic paper in the course) and *second*, to write their own course paper by e.g. identifying and collecting the relevant data and conducting the appropriate empirical analysis.

## References, bibliography and recommended reading

Hesse, Heiko (2016), *Essays on the Global Financial Crisis*, e-book, IMF

IMF (2008-), *Global Financial Stability Report*, various reports with relevant GFC focus

Kolb, Robert (2011), *Sovereign Debt*, Wiley

Kolb, Robert (2010), *Financial Contagion*, Wiley

## Other information

### Place(s) of teaching

Solbosch

### Contact(s)

hhesse2@imf.org

## Evaluation method(s)

Other

## Evaluation method(s) (additional information)

The course evaluation will be based on a presentation of an academic paper in class as well as a written short (research) paper (together with its presentation). The paper could be e.g. a technical literature overview of a sub-field or even own independent empirical research, which could feed into the Master thesis or a later PhD chapter.

## Programmes

### Programmes proposing this course at the Solvay Brussels School of Economics and Management

MA-ECOE | **Master in Economics : Econometrics** | finalité Research in Economics/unit 2 and finalité Research in Economics and statistics/unit 2