

# Welcome to School of Business and Economics

MSc Financial Economics

A passport to the world of financial  
markets

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# What will you learn?

Quantitative focus on financial markets, financial instruments (types and price formation), financial institutions and their economic environment

Three specialisations:

- Asset Pricing
- Banking
- Financial Analysis



# Programme structure

- A specialisation consists of
  - 3 obligatory courses (common to all specialisations)
  - 2 specialisation courses per specialisation (one “integration” course)
  - 1 elective
- No specialisation: 3 obligatory courses + 1 integration course + 2 electives

# MSC Financial Economics - specialisation

## Asset pricing

Period	Asset pricing	
1	ECB and Monetary Policy	Quantitative Techniques for Financial Economics
2	Institutional Investors	Elective
3	Skills training: writing a master's thesis	
4	Fixed Income Management	Writing the Master's Thesis
5	Empirical Analysis of Financial Markets	
6	Completing the master's thesis	

NB. The details of this programme could change; before applying, please check [www.maastrichtuniversity.nl/sbe](http://www.maastrichtuniversity.nl/sbe) for the latest information.

# MSC Financial Economics - specialisation

## Banking

Period	Banking	
1	ECB and Monetary Policy	Quantitative Techniques for Financial Economics
2	Global Banking	Elective
3	Skills training: writing a master's thesis	
4	Fixed Income Management	Writing the Master's Thesis
5	Risk Management	
6	Completing the master's thesis	

# MSC Financial Economics - specialisation

## Financial Analysis

Period	Financial Analysis	
1	ECB and Monetary Policy	Quantitative Techniques for Financial Economics
2	Accounting for Financial Markets	Elective
3	Skills training: writing a master's thesis	
4	Fixed Income Management	Writing the Master's Thesis
5	Empirical Analysis of Financial Markets	
6	Completing the master's thesis	

# MSC Financial Economics - no specialisation

Period	No specialisation	
1	ECB and Monetary Policy	Quantitative Techniques for Financial Economics
2	Global Banking*/Elective	Elective
3	Skills training: writing a master's thesis	
4	Fixed Income Management	Writing the Master's Thesis
5	Emp. Analysis of Financial Markets*/Elective	
6	Completing the master's thesis	

\* At least one of the two indicated courses



# Quantitative Techniques for Financial Economics

- Pricing, construction of (derivative) securities and their use by market practitioners (hedging, speculation)
- Econometric techniques for modeling financial time series with empirical applications

Applying Ito's lemma

$$\begin{aligned}
 dY_t &= \frac{df}{dt} dt + \frac{df}{dx} dX_t + \frac{1}{2} \frac{d^2f}{dx^2} \sigma^2 X_t^2 dt \\
 &= -f dt + 2e^{-t} X_t dX_t + e^{-t} \sigma^2 X_t^2 dt \\
 &= -Y_t dt + 2e^{-t} X_t^2 \frac{dX_t}{X_t} + e^{-t} \sigma^2 X_t^2 dt \\
 &= -Y_t dt + 2Y_t [0.25 dt + \delta dW_t] + \sigma^2 Y_t dt \\
 \frac{dY_t}{Y_t} &= [2 \times (0.25) - 1 + \sigma^2] dt +
 \end{aligned}$$

02:51

SOURAV SIR'S CLASSES

# ECB and Monetary Policy

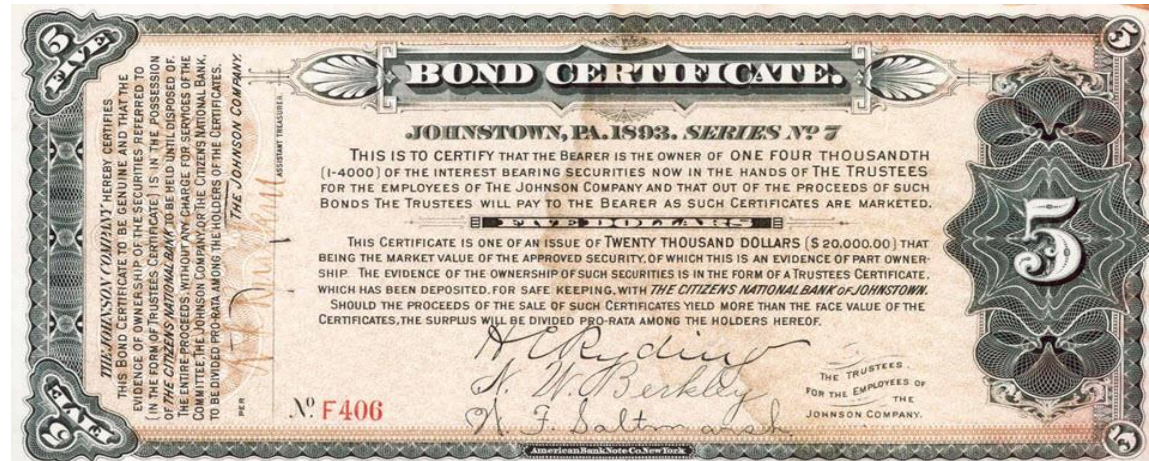


- Why does money exist in an economy?
- “Transmission” channels between monetary /real sphere of the economy
- How effective is monetary policy?
- Position, policies of the ECB (including a visit to the ECB)
- Monetary policy (ECB/FED) has been THE crucial factor in saving the financial system!



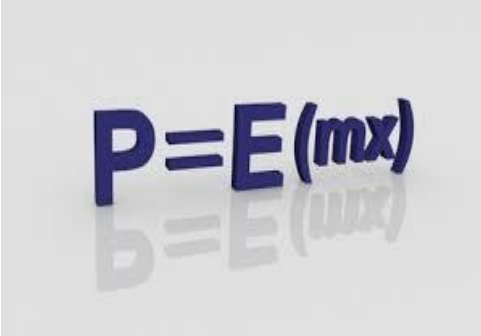
# Fixed Income Management

- Basic concepts of bond pricing
- Portfolio management (e.g. PIIGS debt in current sovereign debt crisis?)
- The role of asset-backed securities (cf. role in 2007 credit crunch)



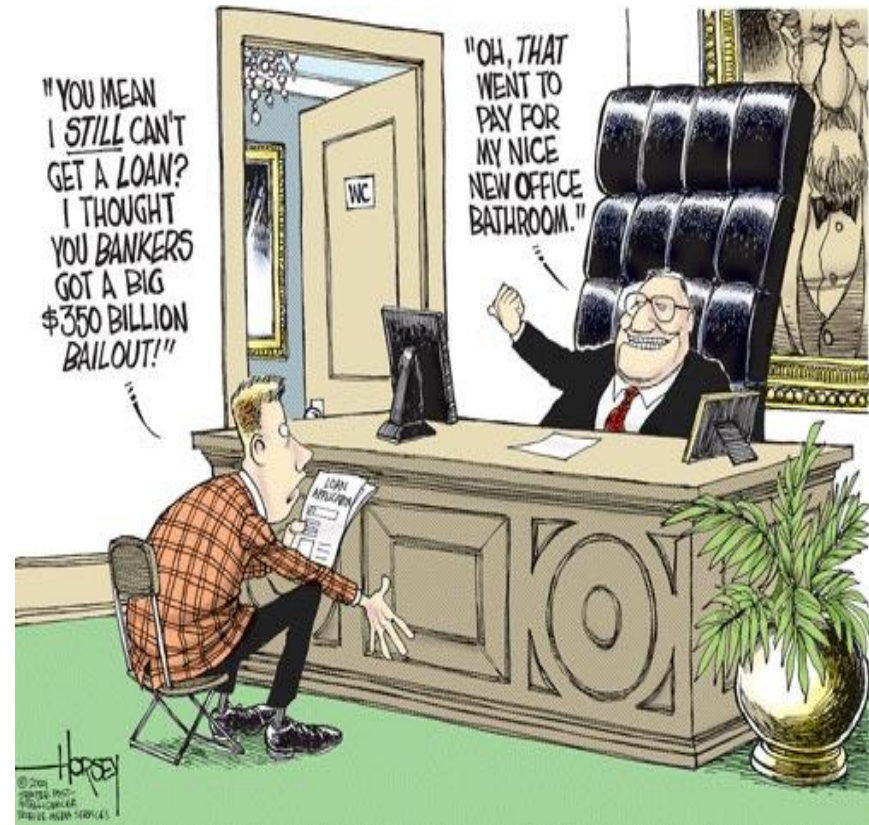
# Specialisation courses Asset Pricing

- Institutional investors
  - Pension funds, mutual funds, hedge funds
  - Asset liability management, strategic asset allocation, shareholder activism and responsible investing
- Empirical Analysis of Financial Markets
  - Strengths and weaknesses of empirical asset pricing tests
  - Research projects: predictability of stock returns; profitability of various trading strategies based on (seeming) anomalies


$$P=E(mx)$$

# Specialisation courses Banking

- Global Banking
  - Why do banks exist?
  - Systemic risk
  - Fintech and digitalisation
  - Shadow banking as a new threat for financial stability
- Risk Management
  - How to manage risk in financial institutions
  - Market, credit and operational risk
  - Changes in financial regulation after the financial crisis



# Specialisation courses Financial Analysis

- Empirical Analysis of Financial Markets
- Accounting for Financial Markets





# Master's Thesis

- Skills training: Develop a high quality research proposal for a master's thesis
- In-depth study of financial economics problem (academic relevance, practical relevance, relevance to you)
- Team up with staff member (supervisor) before or after skills training 'Writing a Master's Thesis'
- Cover 2 of 3 main orientations (monetary economics, finance, quantitative techniques)

# Is Financial Economics right for you?

- Have a keen interest in financial markets and financial institutions
- Have a keen interest in the economic environment in which companies have to operate
- Show familiarity with quantitative techniques





# Careers of our alumni

MSc – Financial Economics (no specialisation)



Graduates  
employed in 19 countries



Consultant  
Financial Advisor  
Statistical Analyst  
CEO



*MSc graduates SBE Financial Economics period 2004-2017*

# Careers of our alumni (2)

MSc – Financial Economics Track Banking



Graduates  
employed in 6 countries



Analyst Mergers & Acquisitions  
Economist  
Investment Analyst  
Consultant



*MSc graduates SBE Financial Economics Track Banking period 2004-2017*



**Maastricht University**

# Careers of our alumni (3)

MSc – Financial Economics Track Financial Analysis



**Graduates**  
**employed in 13 countries**



**Economist**  
**Investment Analyst**  
**Consultant**  
**Financial Analyst**



**Deloitte.**



Deutsche Bank

**ING**



*MSc graduates SBE Financial Economics Track Banking period 2004-2017*



**Maastricht University**

# Careers of our alumni (4)

MSc – Financial Economics Track Asset Pricing



Graduates  
employed in 11 countries



Credit Risk Manager  
Economist  
Financial Analyst  
Consultant



Rabobank



High performance. Delivered.



CONSULTING. TECHNOLOGY. OUTSOURCING.



*MSc graduates SBE Financial Economics Track Asset Pricing period 2004-2017*



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# Further questions?

[www.maastrichtuniversity.nl/sbe](http://www.maastrichtuniversity.nl/sbe)

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➤ Or visit us at the information market in the Mensa