

Long-Term Asset Pricing

Course title – Intitulé du cours	Long-Term Asset Pricing
Level / Semester – Niveau / semestre	M2 / S3
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	Christian Gollier
Other teacher(s) – Autre(s) enseignant(s)	
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Other teacher(s) – Autre(s) enseignant(s)	
Lecture Hours – Volume Horaire CM	15
TA Hours – Volume horaire TD	
TP Hours – Volume horaire TP	
Course Language – Langue du cours	English / Anglais
TA and/or TP Language – Langue des TD et/ou TP	

Teaching staff contacts – Coordonnées de l'équipe pédagogique :

Email and office: Christian Gollier, christian.gollier@tse-fr.eu

Course Objectives – Objectifs du cours :

This course aims at providing science-based instruments to assist public and private decision makers in their evaluation of actions and policies in the face of long-term global risks. How should we manage nuclear wastes? How should we price greenhouse gases? What is the optimal capacity of intensive care units in hospitals in the face of the next “black death” pandemic? I will show standard asset pricing theories can be extended to extreme risks and very long time horizons to translate our responsibility towards future generations and the notion of sustainability into practical evaluation tools such as risk-adjusted discount rates (ineffectively) used by corporations and evaluators of public investment projects around the world.

Prerequisites – Pré requis :

The prerequisites for this course are Macroeconomics (M1), and a basic course in finance.

Practical information about the sessions – Modalités pratiques de gestion du cours :

Students are expected to attend and actively participate in all lectures.

Grading system – Modalités d'évaluation :

The final grade consists of the following parts :

- Final exam at semester end (50 %)
- A case study (50%)

Bibliography/references – Bibliographie/références :

Drupp, Moritz A., Mark C. Freeman, Ben Groom, and Frikk Nesje, (2018), Discounting Disentangled, *American Economic Journal: Economic Policy*, 10 (4): 109-34.

Gollier, Christian, (2017), *Ethical asset valuation and the good society*, Columbia University Press, October 2017, 248 pages. Translated in French (Gollier, 2020).

Gollier, Christian, (2012), *Pricing the planet's future: The economics of discounting in an uncertain world*, Princeton University Press, October 2012.

Gollier, Christian, (2016), Evaluation of long-dated assets : The role of parameter uncertainty, *Journal of Monetary Economics* 84, 66-83.

Session planning – Planification des séances :

Section 1: Social welfare, risk aversion, prudence, and basic asset pricing rule

Section 2: Consumption-based asset pricing theory and observed risk prices

Section 3: The role of deep uncertainties in valuing long-term assets and sustainability

Section 4: Climate change and carbon pricing

Distance learning – Enseignement à distance :

Distance learning can be provided when necessary by implementing, for example: / En cas de nécessité, un enseignement à distance sera assuré en mobilisant, par exemple :

- Interactive virtual classrooms / Classe en ligne interactive
- Recorded lectures (videos) / Vidéo enregistrée de la présentation du matériel pédagogique
- MCQ tests and other online exercises and assignments / QCM et exercices en ligne
- Remote (online) tutorials (classes) / TP/TD à distance
- Chatrooms / Forums