

## RISK MARKET AND VALUE CREATION

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**Academic partner(s)** : TSE-Partnership Foundation (TSE-P)

**Financial partner(s)** : SCOR Foundation for Science

**Scientific director(s)** : Stéphane Villeneuve (TSE)

**Website** : <https://www.tse-fr.eu/scor?lang=en>

### RESEARCH PROGRAM DESCRIPTION

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The SCOR Chair “Risk Markets and Value Creation” has been created in 2008, and it has been renewed four times since, in 2012, 2017, 2020 and 2023. The last renewal was signed in 2023, for the period from 2023 to 2026. This support allows TSE economists to continue their work, to better understand how risk transforms and influences economics decisions.

Since its creation, the Chair has included a team of researchers, now totalling 15, who have actively participated and contributed to ensuring the partnership runs as efficiently as possible. Through their work, the Chair has always aimed to support theoretical and applied research on risk sharing, with a view to combining the methodologies of financial economics, industrial organization, and econometrics. The Chair's hard work is now reflected in a long list of academic publications on topics of high interest to SCOR.

As part of this renewal, the Chair's searchers focus their work on Economics of Risk and Uncertainty.

Some key topics include:

- Longevity risk, long-term care and (social) insurance
- Risk attitude: ambiguity, psychological bias and long-term investment
- Risk mechanism: regulation, liquidity and solvency risks, asset pricing

Detailed description of the scientific projects developed within the Chair:

1. Behavioral Economics:

- Ethics by Jean Tirole
- Behavioral Insurance Economics by Nicolas Treich

2. Green Challenges for Long-term Investments

- Sustainability outside the Gaussian world by Christian Gollier
- Tipping Points by Jean-Paul Décamps, David Martimort and Stéphane Villeneuve
- Cost of capital, liquidity holding and green transition by Jean-Paul Décamps and Stéphane Villeneuve
- Socially Responsible Investment under the threat of Greenwashing by Andrea Attar, Catherine Casamatta, Arnod Chassagnon and Jean-Paul Décamps

### 3. Capital requirements for insurance companies

- Capital requirements for insurance companies by Jean-Charles Rochet and Stéphane Villeneuve

### 4. Health Economics and Aging

- Screening for fragility with primary and secondary prevention by Helmuth Cremer and Jean-Marie Lozachmeur
- Health economics and ageing: Diets across life courses by Catarina Goulao
- Social norms and consumption by Catarina Goulao
- Social LTC insurance with different sources of dependence by Pierre Pestieau
- Bequests, mortality and dependence by Pierre Pestieau and Emmanuel Thibault
- The timing of intergenerational transfers by Helmuth Cremer, Jean-Marie Lozachmeur, Pierre Pestieau and Emmanuel Thibault
- The differential taxation of inter-vivo gifts and bequests and LTC insurance by Helmuth Cremer, Jean-Marie Lozachmeur and Pierre Pestieau
- *Worker's motivation and quality of care in nursing homes by Helmuth Cremer*

## **RESEARCH TEAM**

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### **Researchers**

- ATTAR Andrea, CNRS
- CREMER Helmuth, GE TSE
- DEDONDER Philippe, CNRS
- DECAMPS Jean-Paul, GE TSE
- GOLLIER Christian, GE TSE
- GOULAO Catarina, INRAE
- LOZACHMEUR Jean-Marie, CNRS
- PESTIEAU Pierre, Retraité
- ROCHET Jean-Charles, GE TSE
- SALANIE François, INRAE
- THIBAUT Emmanuel, Univ Perpignan
- TIROLE Jean, Retraité
- TREICH Nicolas, INRAE
- VILLENEUVE Stéphane, GE TSE
- BIANCHI Milo, TSE

## **PUBLICATIONS OF THE YEAR DIRECTLY RELATED TO THE RESEARCH PROGRAM**

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### **Published**

Helmuth Cremer, and Chiara Canta - "Asymmetric information, strategic transfers and the design of long-term care policies", *Oxford Economic Papers*, vol. 75, n. 1, January 2023, pp. 117–141

Stéphane Villeneuve, and Jessica Martin - "Risk-sharing and optimal contracts with large exogenous risks", *Decisions Econ Finan.* February 2023; 46(1): 1–43.

Philippe De Donder, Marie-Louise Leroux, and François Salanié - "Advantageous selection without moral hazard", *Journal of Risk and Uncertainty*, May 2023

Francesca Barigozzi, Helmuth Cremer, and Jean-Marie Lozachmeur - "Gender wage and longevity gaps and the design of retirement systems", *Journal of Economic Behavior & Organization*, Volume 209, May 2023, Pages 263-287

Olivier Armantier, Jérôme Foncel, and Nicolas Treich - "Insurance and portfolio decisions: Two sides of the same coin?", *Journal of Financial Economics*, Volume 148, Issue 3, June 2023, Pages 201-219

Romain Espinosa, and Nicolas Treich - "Eliciting Non-hypothetical Willingness-to-pay for Novel Products: An Application to Cultured Meat", *Environmental and Resource Economics*, vol. 85, August 2023, p. 673–706

Philippe De Donder, Martin Boyer, Claude Fluet, Pierre-Carl Michaud, and Marie-Louise Leroux - "La mauvaise perception des risques de longévité et de dépendance ne suffit pas à expliquer la faiblesse du marché de l'assurance dépendance (au Canada)", *Revue d'économie financière*, n. 151, November 2023

Chiara Canta, Helmuth Cremer, and Firouz Gahvari - "Welfare-improving tax evasion", *The Scandinavian Journal of Economics*, vol. 126, n° 1, janvier 2024, p. 98–126

Francesca Barigozzi, and Helmuth Cremer - "Shining with the stars: Competition, screening, and concern for coworkers' quality", *Games and Economic Behavior*, vol. 144, 2024, p. 250–283

### **Under review**

Felix Dammann, Néofytos Rodosthenous and Stéphane Villeneuve, "Debt management game and debt ceiling", *TSE Working Paper*, n° 23-1430, april 2023, *Applied mathematics and optimization*

Eduardo Abi Jaber and Stéphane Villeneuve, "Gaussian Agency problems with memory and Linear Contracts", *Finance and Stochastics*, 2024, forthcoming (October 2024)

### **Working papers**

Francesca Barigozzi, Helmuth Cremer, and Emmanuel Thibault - "The motherhood wage and income traps", *TSE Working Paper*, n° 23-1426, April 2023

Claire Borsenberger, Helmuth Cremer, Denis Joram, Jean-Marie Lozachmeur, and Estelle Malavolti - "Testing for fragility: a valuable public policy and an opportunity for postal operators", *TSE Working Paper*, n° 23-1433, May 2023

Catarina Goulão and Agustín Pérez-Barahona - "Health aspirations and the epidemic of non-communicable chronic diseases", TSE Working Paper, n° 21-1236, July 2021, revised June 2023

Philippe De Donder, Bertrand Achou, Franca Glenzer, Minjoon Lee, and Marie-Louise Leroux - "At Home versus in a Nursing Home: Long-term Care Settings and Marginal Utility", CESifo Working Paper No. 10482, June 2023

Emmanuel Thibault and Grégory Ponthieres - "Life Expectancy, Income and Long-Term Care: The Preston Curve Reexamined", TSE Working Paper, n° 23-1474, October 2023

Philippe De Donder and David Bardey - "A Welfare Analysis of Genetic Testing in Health Insurance Markets with Adverse Selection and Prevention", TSE Working Paper, n. 19-1035, September 2019, revised January 22, 2024

Stéphane Villeneuve, Bruno Biais, Hans Gersbach, Jean-Charles Rochet, and Ernst-Ludwig von Thadden - "Dynamic Contracting with Many Agents", TSE Working Paper, n° 24-1511, February 2024

## **MAJOR COMMUNICATIONS RELATED TO THE RESEARCH PROGRAM**

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### **Major academic conferences, invited speaker, etc.**

#### **Sustainable Finance Conference – December 2023 - TSE**

TSE held the 3rd edition of its Sustainable Finance Conference on 2023, December 7<sup>th</sup> and 8<sup>th</sup>, in Toulouse.

In the "Climate risks and regulation" panel discussion, several experts were invited to share their views about the insurance and reinsurance industry, and the impact of climate change on the sector. **Marie-Laure Fandeur, Head of P&C ESG at SCOR**, has been invited to the roundtable, where she has described the use of hazard, vulnerability, and financial modules in assessing risks. She was also able to highlight the fact that the pressure exerted by EU regulations to promote transparency was viewed favourably by reinsurers such as SCOR.

### **Events organized by the program**

#### **Conference on Risk Markets and Value Creation – October 2022 - TSE**

To express the delight of starting up in-person events again, and in anticipation of the year 2023, which marks a new renewal between TSE-P and the SCOR Foundation for Science, a conference was organized on October 21 and 22, 2022 in Toulouse.

Presentations on the opening morning of the event included Thomas Dohmen (University of Bonn) on the validity of 'Survey Measures of Risk Preferences', Stéphane Loisel (University of Lyon) on the challenges of longevity risk, and Caroline Hillairet (ENSAE-Paris Tech, CREST) on sustainable pension policy. In the afternoon, François Salanié (INRAE, TSE) focused on the delay following a tipping point before it triggers catastrophe. How might this impact optimal policies? Meanwhile, Julia Holzapfel (University of Munich) examined the use of genetic and behavioral information for pricing insurance contracts. Stéphane Villeneuve concluded this first day by presenting his research on Gaussian agency problems with memory and linear contract.

Highlights on Day 2 included Christian Gollier (TSE) on 'The Discounting Premium Puzzle' and Patrick Pintus (University of Aix Marseille) on the use of population data to track pandemics and assess vaccines in real time. Joël Shapiro (University of Oxford) concluded the event by presenting his research into the impact of stress tests on banks' lending decisions.

## OTHER HIGHLIGHTS

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**Awards, scientific recognition, organization of calls for projects, involvement in master's courses, PhD program visiting researchers, etc...**

The Risk Markets and Value Creation Chair supports the prizes organized within the framework of the 2023 annual seminar of the EGRIE (European Group of Risk and Insurance Economists).

- **SCOR-EGRIE Young Economist Award**

Winner: Moritz Loewenfeld Jiakun Zheng.

Paper: Uncovering correlation sensitivity in decision making under risk

- **SCOR – The Geneva Risk and Insurance Review Best Paper Award**

Winners: Enrico Biffis, Erik Chavez, Alexis Louaas, and Pierre Picard.

Paper: "Parametric insurance and technology adoption in developing countries" Geneva Risk and Insurance Review, 47(1), March 2022, 7–44