



Toulouse
School of
Economics

SCOR
FOUNDATION FOR SCIENCE

SCOR Chair Risk Markets & Value Creation Activity report 2024

Economics for the common good

SOMMAIRE

INTRODUCTION.....	2
PUBLISHED WORKS AND SCIENTIFIC CONTRIBUTIONS.....	2
1. Articles in peer-reviewed journals.....	2
2. Working papers under review.....	3
3. Working papers	4
FOCUS ON A SELECTION OF PROJECTS HIGHLIGHTED IN THE TSE-SCOR FOUNDATION FOR SCIENCE JOURNAL	4
SCIENTIFIC EVENTS.....	5
1. 23rd European Health Economics Workshop, 23-24 April, 2024	5
2. TSE-SCOR Webinar on Cryptocurrency, September 19, 2024	5
3. TSE-SCOR Workshop Machine Learning Methods for Econometrics, January 31, 2025	5
4. Denis Kessler Tribute Conference, March 20, 2025.....	6
BILATERAL MEETINGS	6
2024 SCOR AWARDS.....	6
1. SCOR-EGRIE Young Economist Best Paper Award	6
2. SCOR – The Geneva Risk and Insurance Review Best Paper Award.....	7
OTHER OUTREACH MATERIAL	7
1. TSE newsletter	7
APPENDIX.....	8
1. Lists of members of the scientific team and the scientific council.....	8
2. Full list of research themes and projects as described in the Chair agreement.....	9

INTRODUCTION

Risk management and decision under uncertainty have been the *raison d'être* of the Chair Risk markets and value creation since its creation in 2008. Supported by SCOR and its corporate foundation, TSE has developed over the past 17 years both theoretical and applied novel research to better understand how risk shapes the world. The SCOR Foundation for science has renewed its support to TSE for this Chair in 2023 for an additional three-year period, until 2026. As we present our activity report for the second year of this renewed partnership, researchers involved in the chair would like to thank the SCOR Foundation for Science for its trust and support.

As a reminder of our framework agreement, the expected outputs and deliverables for the Chair are the following:

- Developing research work on the four risk-related themes in which TSE researchers are involved (see the list of themes and projects, as well of the list of researchers involved in appendix);
- Organization of one conference every 18 months (or two over the duration of the partnership);
- Organization of one or two workshop(s) or webinar(s) per year;
- Editing a biannual newsletter (TSE-SCOR Foundation for Science Journal);
- Organization of an annual meeting of the steering committee in charge of thematic validation.

This report focuses on the outputs and deliverables for the period from June 1st, 2024, to March 31, 2025. The conference in tribute to Denis Kessler, originally scheduled for February 2024, has been postponed to March 20, 2025, at the request of SCOR. The event has been scheduled on this new date, allowing for more suitable timing and organization.

PUBLISHED WORKS AND SCIENTIFIC CONTRIBUTIONS

One of the special features of the Chair is to combine different methodologies from financial economics, industrial organization and econometrics which enables us to cover a broad spectrum of risk-related issues.

The projects encouraged by the SCOR Foundation for Science in the context of our research Chair have given rise to working papers and articles over the period from June 2024 to end of March 2025. They are listed below for the given period:

All papers are available at: <https://www.tse-fr.eu/scor?tabs=0>

1. Articles in peer-reviewed journals

- Francesca Barigozzi, and **Helmuth Cremer**, "Shining with the stars: Competition, screening, and concern for coworkers' quality", Games and Economic Behavior, vol. 144, 2024, pp. 250–283.
- Francesca Barigozzi, **Helmuth Cremer**, and Emmanuel Thibault, "The Motherhood Wage and Income Traps", Journal of Population Economics, vol. 37:74, 2024.

- **Christian Gollier**, “Evaluating sustainability actions under uncertainty: The role of improbable extreme scenarios”, *The Geneva Risk and Insurance Review* 49, 2024, 59–74.
- Drupp, M.A., M.C. Hansel, E.P. Fenichel, M. Freeman, **C. Gollier**, B. Groom, G.M. Heal, P.H. Howard, A. Millner, F.C. Moore, F. Nesje, F. Quaas, S. Smulders, T. Sterner, C. Traeger, and F. Venmans, “Accounting for the increasing benefits from scarce ecosystems”, *Science* 383, 2024, 1062–1064.
- **Christian Gollier**, Discounting, in *Handbook of the Economics of Climate Change*, L. Barrage and S. Hsiang Eds, Elsevier, 2024.
- **Christian Gollier**, “The cost-efficiency carbon pricing puzzle”, *Journal of Environmental Economics and Management* 128, 2024.
- Chiara Canta, **Pierre Pestieau**, and Jérôme Schoenmaeckers – “Blood and gender bias in informal care within the family”, *Review of Economics of the Household*, 22, June 2024, 595–631.
- Mathias Dewatripont, and **Jean Tirole**, “The Morality of Markets”, *Journal of Political Economy*, vol. 132, n. 8, 2024, pp. 2655–2694.
- Perelman, S. **et P. Pestieau**, “Comment gérer la fin de vie ?”, *Futuribles*, #460, 2024.
- Felix Dammann, Neofytos Rodosthenous et **Stéphane Villeneuve**, « A Stochastic Non-Zero-Sum Game of Controlling the Debt-to-GDP Ratio », *Applied Mathematics & Optimization*, October 2024.
- **Jean-Paul Décamps**, **Fabien Gensbittel**, and **Thomas Mariotti** – “Investment Timing and Technological Breakthroughs”, *Mathematics of Operations Research*, December 2024.
- David Bardey, and **Philippe De Donder**, “A Welfare Analysis of Genetic Testing in Health Insurance Markets with Adverse Selection and Prevention”, *Canadian Journal of Economics*, Toronto, 2025, forthcoming.
- M.Lefebvre, **P. Pestieau** and J. Schoenmaeckers, “Grandchild care and Eldercare. A quid pro quo arrangement”, *Economic Modelling*, forthcoming.
- Eduardo Abi Jaber and **Stéphane Villeneuve**, “Gaussian Agency problems with memory and Linear Contracts”, *Finance Stoch* 29, 143–176 (2025).

2. Working papers under review

- Matthew Adler, Maddalena Ferranna, James Hammitt, Eugénie de Laubier and **Nicolas Treich**, “Fair innings: An empirical test”, *Health Economics R&R*, 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, 2024.

3. Working papers

- **Helmuth Cremer**, and **Jean-Marie Lozachmeur**, “Nonlinear reimbursement rules for preventive and curative medical care”, TSE Working Paper, n. 24-1527, 2024, revised June 2024.
- **Jean-Paul Décamps**, **Thomas Mariotti**, and **Fabien Gensbittel**, “Mixed Markov-Perfect Equilibria in the Continuous-Time War of Attrition”, TSE Working Paper, n. 24-1562, August 2024.

FOCUS ON A SELECTION OF PROJECTS HIGHLIGHTED IN THE TSE-SCOR FOUNDATION FOR SCIENCE JOURNAL

This journal highlights articles from TSE researchers or, in some cases, researchers from prestigious universities who have been involved in the activities of the Chair, as well as prizes, past or upcoming events, or any other news related to the collaboration between TSE and the SCOR Foundation for Science. The Journals are also disseminated on TSE’s social networks, in the “TSE Reflect” newsletter for practitioners and on the TSE webpage dedicated to the Chair.

All journals are available on [the TSE website](#).

The latest issue of the Journal was an occasion to disseminate popularized versions of two papers authored by TSE researchers who are involved with the Chair:

- **C.Gollier** “The welfare cost of ignoring the beta”
- **S.Villeneuve** “Do cryptocurrencies matter?”

Latest issue:

November 2024



Below are two examples of works-in-progress directly enabled or stimulated by the partnership between TSE and the SCOR Foundation for Science. We will focus on these two projects in the next TSE-SCOR Foundation for Science Journal forthcoming in April 2024.

- A Welfare Analysis of Genetic Testing in Health Insurance Markets with Adverse Selection and Prevention (Theme: Health economics and aging)
- Investment Timing and Technological Breakthroughs (Theme: Green Challenges for Long-term Investments)

SCIENTIFIC EVENTS

1. 23rd European Health Economics Workshop, 23–24 April, 2024

The 23rd European Health Economics Workshop (EHEW), organized by Chiara Canta (TBS Education) and Catarina Goulão (TSE), took place in Toulouse. Co-organized by TBS Education and Toulouse School of Economics, the event brought together international researchers in Health Economics. The workshop focused on discussing microeconomic models applied to health economics, emphasizing industrial organization, contract theory, insurance economics, and public economics. Topics included competition, regulation, insurance, pharmaceuticals, antibiotic resistance, long-term care, chronic conditions, nutrition policies, and digital health.



researchers in Health Economics. The workshop focused on discussing microeconomic models applied to health economics, emphasizing industrial organization, contract theory, insurance economics, and public economics. Topics included competition, regulation, insurance, pharmaceuticals, antibiotic resistance, long-term care, chronic conditions, nutrition policies, and digital health.

2. TSE–SCOR Webinar on Cryptocurrency, September 19, 2024

On September 19, 2024, the TSE–SCOR Webinar on Cryptocurrency was presented by Stéphane Villeneuve. He explored the question: *Can cryptocurrency be useful in countries in which government and central bank are dysfunctional?* He analyzed the reasons why the digital assets have gained popularity. He considered a simple general equilibrium model under uncertainty. Because of this uncertainty, the agents value the opportunity to hold "safe" assets whether public or private money, helping them to buffer shocks.

3. TSE–SCOR Workshop Machine Learning Methods for Econometrics, January 31, 2025

The TSE–SCOR Workshop on Machine Learning Methods for Econometrics was held on January 31, 2025, at SCOR headquarters in Paris. Organized by Nour Meddahi and Stéphane Villeneuve from TSE, the event explored applications and limitations of machine learning in econometrics. Presentations by leading scholars included Nour Meddahi's overview of machine learning in econometrics, René Garcia on portfolio allocation, Christian Gourieroux discussing cyber risk measurement, and Dacheng Xiu addressing machine learning in asset pricing. The workshop provided a platform for examining both advancements and challenges in applying machine learning to economic and financial analysis.

[Program](#)

[Webpage and photos](#)

4. Denis Kessler Tribute Conference, March 20, 2025

TSE and the SCOR Foundation for Science have joined forces to organize a tribute to Denis Kessler at Maison de la Chimie in Paris. The idea behind the conference was to commemorate Denis Kessler's contribution to the world of economics research, and to evoke memories of the intellectual debates that fascinated him. This scientific conference, due to take place in February 2024, has been postponed to March 2025 at the request of SCOR.



Program

BILATERAL MEETINGS

Monthly meetings, often involving Zeying Peuillet (for the SCOR Foundation for Science), Stéphane Villeneuve (for TSE) either online or in person, have been held since June 2024 to ensure follow-up on the partnership, and prepare upcoming conferences or workshops.

The coordinator of the partnership plans to organize the next steering committee meeting before July 2025.

2024 SCOR AWARDS

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

1. SCOR-EGRIE Young Economist Best Paper Award

The SCOR-EGRIE prize for the best paper written by a young economist is organized under the responsibility of the "Risk Markets and Value creation" chair of TSE-P and the Dauphine University of Paris. It is sponsored by the SCOR Foundation for Science and the Risk Foundation.

The selection committee is composed of five people representing the following institutions: EGRIE, SCOR, Fondation du Risque, Dauphine, and TSE-P. (Christophe Courbage *Geneva Association*, Elyes Jouini *Université Paris Dauphine*, Philippe Trainar *Fondation SCOR*, Bertrand Villeneuve *Université Paris Dauphine* and Stéphane Ville-
neuve *Toulouse School of Economics*).

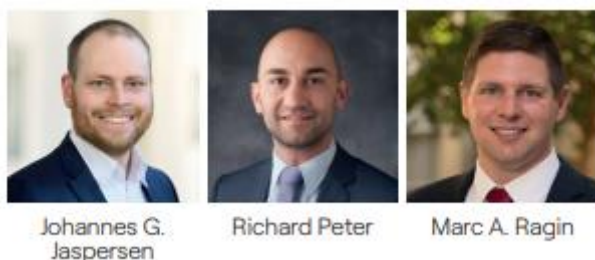
During the 2024 annual seminar of the European Group of Risk and Insurance Economists, the prize "SCOR-EGRIE Young Economist Best Paper Award" was awarded to Yaming Cao (The ZEW – Leibniz Centre for European Economic Research) for her paper: "Earnings dynamics and selection in health insurance markets"



2. SCOR – The Geneva Risk and Insurance Review Best Paper Award

For the SCOR-Geneva Risk and Insurance Review Best Paper Award for the best paper published in the *Geneva Risk and Insurance Review*, the selection committee is composed of the editors and associate editors of the *Geneva Risk and Insurance Review* (GRIR).

Johannes G. Jaspersen (Munich School of Management of LMU Munich), Richard Peter (University of Iowa), and Marc A. Ragin (University of Georgia) were the 2024 laureates for their paper: "Probability weighting and insurance demand in a unified framework".



OTHER OUTREACH MATERIAL

1. TSE newsletter

The work undertaken with the support of the SCOR Foundation for Science, and the events organized with its support, have also been a regular feature of the TSE newsletter. TSE sends out the monthly e-newsletter TSE Reflect (whose theme varies every two months) to share the latest work of its researchers with economic decision-makers, and first and foremost with its partners. The theme of sustainable finance, risk and insurance is addressed every year, and the other regular topics are energy and climate, infrastructure and networks, health, the digital economy, regulation and competition.



Our work with the SCOR Foundation for Science was featured in the 2024 sustainable finance newsletter in June 2024.

APPENDIX

1. Lists of members of the scientific team and the scientific council

Scientific team funded by the research program

- Andrea ATTAR, TSE
- David BARDEY, Université Los Andes, Bogota, TSE faculty associate
- Helmut CREMER, TSE
- Philippe DE DONDER, TSE
- Jean-Paul DECAMPS, TSE
- Christian GOLLIER, TSE - **Co- Head of the Chair**
- Catarina GOULAO, TSE
- Jean-Marie LOZACHMEUR, TSE
- Pierre PESTIEAU, Université de Liège, TSE faculty associate
- Emmanuel THIBAUT, Université de Perpignan, TSE faculty associate
- Jean TIROLE, TSE
- Nicolas TREICH, TSE
- Stéphane VILLENEUVE, TSE - **Head of the Chair**

Scientific team not funded by the research program

- Milo BIANCHI, TSE
- Catherine CASAMATTA, TSE
- David MARTIMORT, TSE
- Jean-Charles ROCHET, TSE
- François SALANIE, TSE

Scientific Council

- André Lévy-Lang, Chairman, SCOR Corporate Foundation for Science and Chairman of the supervisory board,
- Yassine Lefouili, Director, TSE-Partnership
- Philippe Trainar, Director, SCOR Foundation
- Elyès Jouini, Scientific Directory President, Institut Louis Bachelier
- Louis Eeckhoudt, Professor, School of Management Lille IESEG
- Xavier Freixas, Professor, Pompeu Fabra University Barcelona

2. Full list of research themes and projects as described in the Chair agreement

A. Behavioral Economics

1. Ethics by Jean Tirole

This research project aims to propose a comprehensive review of the ethical considerations when implementing policies to change economic behavior. More generally, all studies that define a theoretical framework to ensure that ethical considerations are part of economic policy issues are at the heart of this project led by Jean Tirole. Questions such as « Do markets encourage unethical behaviors? » will receive a particular attention. On the other hand, technology widens the access to information about our conduct. This project aims at shedding theoretical and empirical light on induced behavioral changes with the booming of digital economy.

2. Behavioral Insurance Economics by Nicolas Treich

Most research in insurance economics has assumed that agents are fully rational. The objective of the research project is to explore both theoretically and empirically the impact of behavioral limitations on insurance demand and insurance markets more generally. Indeed, the domain of insurance provides a rich ground for this investigation since it involves (e.g.) decision under risk and uncertainty, long term effects and complexity. Moreover, recent empirical research has identified several puzzles with classical/rational theories in insurance economics, such as underinsurance of catastrophic risks or overinsurance of home risks (Sydnor 2010), excessive demand for extended warranties (Abito and Salant 2019), over-reaction to recent events (Dumm et al. 2017), preference for dominated choices in the health domain (Bhargava et al. 2017, Handel and Kolstad 2015), inconsistent choices across different insurance domains (Barseghyan et al. 2011) or puzzling wealth effects (Armantier et al. 2022). Several recent papers stress in particular the importance of regret, confirmatory bias, motivated reasoning and social norms in risky decisions as well as the emotional or psychological reaction to dramatic events such as death or severe accidents that may play a role in life insurance or annuity demand for instance. Finally, an important aspect is to understand the strategic dimensions, as insurance companies may exploit consumers' behavioral limitations, or instead help consumers to make better insurance-related decisions (through "nudges" for instance). Hence, this research project which lies at the interface of insurance and behavioral economics may also help better understand the role of the supply side of the insurance market in exacerbating or instead mitigating those behavioral failures.

B. Green Challenges for Long-term Investments

1. Sustainability outside the Gaussian world by Christian Gollier

The tradition in finance and economics is to measure risk mostly by the standard deviation. This is fine only for risks whose distributions have only two parameters, as in the Gaussian world. Recent developments in asset pricing theory and actuarial sciences show that people and institutions are much more averse to extreme events than to "gaussian risks". This project aims to examine the meaning of these findings to reexamine the notion of long-term sustainability and long-term asset pricing. TSE researcher Christian Gollier will be particularly interested in characterizing climate risks in their non-Gaussian dimensions and statistical relationships with other macroeconomic and financial variables, as they appear in standard integrated assessment models, to reevaluate the social cost of carbon.

2. Tipping Points by Jean-Paul Décamps, David Martimort and Stéphane Villeneuve

Tipping points are critical thresholds about some key variables beyond which a whole system abruptly shifts to a completely new and irreversible state. Environmental damages are thought to be characterized by tipping points. For instance, beyond some threshold of release of greenhouse gases, climate change should be irreversible, leading to high societal costs (Van der Ploeg, F. (2014). "Abrupt Positive Feedback and the Social Cost of Carbon," *European Economic Review*, 67: 28–41). Predicting these warning thresholds is challenging. It can be also difficult to observe them and to know whether a system already entered a new irreversible state. Typically, Decision Makers have only incomplete information on the timing and the scope of the changes. For instance, the user of a fragile natural resource must beware of overexploitation that would destroy the resource without however knowing the true threshold of over-exploitation. The user of the fragile resource must also take into account the possibility of an abrupt regulation that would impact his/her activity. The regulator for its part has also incomplete information on tipping points, the irreversible nature of the changes and the incurred social costs. How should an optimal policy deal with tipping points that occur at some future random moment? Jean-Paul Décamps, David Martimort and Stéphane Villeneuve propose in this research program to study a generic model for the optimal liquidity management subject to an abrupt change and to use it as workhorse model to investigate several issues on risk management. Drawing on their previous works funded by the chair, they plan to study cash management under the specter of transition issues. How do transition issues impact corporate cash management when the timing and the scope of these transitions are unknown? How does the magnitude of climate policy change uncertainty impacts cash management and the decision to switch to green technologies? How management policies integrate the risk of sudden changes in regulatory policies? Under which risks and under which conditions is it optimal to switch from a brown technology to a green one and what are the consequences on cash management?

3. Cost of capital, liquidity holding and green transition by Jean-Paul Décamps and Stéphane Villeneuve

The green transition relies on access to low-cost capital, so there is a need to reduce the cost of capital for green transition projects. In Europe, a number of regulations have been introduced in recent years to help redirect financial flows towards more sustainable activities. Among these, the taxonomy regulation establishes a classification of economic activities that are considered environmentally sustainable, and promotes their financing with the aim of helping to reduce the cost of capital. Because low-carbon projects are technologically highly constrained or require a major research effort, making them less profitable than proven carbon technologies, decision makers face a trade-off between two distinct sets the first one is subsidized but not necessarily profitable and the second one which is profitable but suffers from a higher cost of capital. The aim of this paper is to quantify this trade-off relying on dynamic corporate finance models that have been successful in providing insights and guidance for investment and financing when financial markets exhibit frictions. A particular attention will be paid to determine the optimal time for a firm exploiting a carbon technology to switch to a more climate-efficient project and how this transition date depends on the characteristics of the regulation in place.

4. Socially Responsible Investment under the threat of Greenwashing by Andrea Attar, Catherine Casamatta, Arnod Chassagnon and Jean-Paul Décamps

The great environmental crisis we are experiencing, together with the numerous social catastrophes and the corporate instability arising at an international level, have dramatically increased the concern of financial institutions for sustainable development. According to the 2020 Global Sustainable Investment Alliance Review, sustainable investment has reached US\$35.3 trillion assets under management (a growth of 15% in two years), amounting to 36% of the global asset management industry. In recent years, financial economics research has developed to analyze the conditions for SRI to affect entrepreneurial decisions, thereby generating new channels for economic growth. In such contexts, the traditional presumption that firms should maximize their market value (Friedman, 1970) may no longer be valid, and the investors' pressure over the management to fight environmental damages may instead result in socially desirable outcomes (Broccardo, Hart and Zingales, 2022). In the proposed project, we plan to further investigate this issue, by focusing on a fundamental difficulty faced by socially responsible investors in allocating their capital. Specifically, we will consider the threat of firms' "greenwashing" behaviors, which consist in all manipulations directed at misleading investors by misstating their sustainability initiatives. This is indeed a growing concern for financial market participants who must rely on companies' subjective SRI disclosures to inform their investment decisions (Musciano, 2022). Yet, few, if any, theoretical results are available on the impact of such practices on market allocations. The objective of the researchers involved in this project is to explicitly analyze the agent's incentives to greenwash in a setting where firms need to raise funds to deploy their strategies, and where the social impact (or "greenness") of these strategies is not perfectly observable. They plan to investigate two distinct questions:

i) Can SRI funds manage to improve the behavior of their portfolio companies when they cannot fully monitor the responsible conduct of their investees? Is it possible to sustain green strategies that ensure the transition towards a green economy?

iii) How do firms' incentives to implement responsible strategies vary when both SRI and non-SRI funds can provide capital to implement the firms' projects? In other words, what social outcome can be achieved when funds with different preferences for green/responsible outcomes coexist on the market. Several recent papers have analyzed the equilibrium return of green and brown firms in the presence of heterogeneous investors (see, for instance, Pastor, Stambaugh and Taylor, 2021). Still few have considered how the resulting allocation of capital can affect firms' incentives to develop green strategies. Overall, it is expected that this project yields novel results both at a positive and at a normative level. In positive terms, the researchers will contribute to the understanding of the actual conduct of SRI funds, and to shed light on the ongoing debate over the practical impact of SRI. On the normative side, they aim at identifying new forms of regulatory interventions for markets in which socially responsible investors co-exist with conventional ones.

C. Capital requirements for insurance companies

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

The debate on the costs and benefits of imposing a capital floor on regulated financial institutions has been a major issue for decades, with no real theoretical consensus. The benefits stem from the fact that a larger capital reserve compensates for potential exceptional losses without public intervention, thereby reducing the risk of financial crises, which, as past and recent history has shown, generate substantial economic costs. On the other hand, too high a level of regulatory constraints undermines investment in productive assets by making access to outside financing more expensive, with potentially lasting effects on the level of economic activity. It is therefore important to quantify the scale of these costs and benefits to impose the

optimal level of capital requirement. To tackle this question, we plan to build an analytically tractable dynamic macro model along lines of Brunnermeier and Sannikov (AER 2014) taking advantage of recent advances in mean-field optimal control theory. It features incomplete financial markets and two-types of risk-averse agents: regulated financial institutions and firms owners subject to idiosyncratic productivity shocks. In addition, the economy faces an aggregate risk which induces a shock that is all the greater the more undercapitalized the financial institutions. Firms finance their investments by raising outside funds from the capital market through financial institutions. The higher the level of capital, the greater the cost of external financing which has a negative impact on the size of investments. Because the firm revenues are private information, the social planner aims to design a dynamic multi-agent mechanism to share risk and optimize inter temporal production and consumption.

D. Health Economics and Aging

1. Screening for fragility with primary and secondary prevention by Helmuth Cremer and Jean-Marie Lozachmeur

A better designed dependency policy appears to be required to prevent a grim future for the upcoming “Papy-Boomer” generation. In particular, preventive care should be developed. Helmuth Cremer and Jean-Marie Lozachmeur propose to analyze the optimal long term care policies which include, in addition to long term care expenditures, also primary and secondary prevention policies. The first stage consists in testing and screening individuals for their risk of becoming dependent. This screening procedure would allow to target primary prevention in order to reduce the risk of becoming dependent more effectively. The screening procedure would also allow to offer some secondary prevention aimed at mitigating severity of the affection and maintaining individual's capacities. These two types of prevention are complementary and could increase wellbeing of the elderly as well as decrease long term care expenses by reducing health and nursing homes expenditures.

2. Health economics and ageing: Diets across life courses by Catarina Goulao

Ultra-processed (UP) food consumption has been recently associated with the prevalence of obesity and non-communicable chronic diseases such as some types of cancers, diabetes, and heart diseases. Catarina Goulao will construct a unique longitudinal dataset, between 2002 and 2015, of at-home food consumption of French households and will merge this dataset with information regarding nutritional values and degree of food processing. She will develop a panel data econometric analysis to identify the determinants of ultra-processed food consumption exploiting the within- and betweenhousehold variations. Socio-economic demographics can in principle explain more the between-household variation than the within-household variation. In fact, differences between households are expected to be due to obesity status, age, poverty. Nonetheless, Catarina Goulao wants to understand whether some life events with impact in time constraint are associated higher UP consumption. She expects to understand whether policies aiming at decreasing UP consumption should, on the one hand, focus on specific population groups or, on the other hand, use price reductions as lever for within-household change of consumption patterns.

3. Social norms and consumption by Catarina Goulao

Estimates suggest that 80% of non-communicable chronic diseases (NCDs)' premature deaths would be preventable with an appropriate change in its most important risk factors such as unhealthy eating, smoking and physical inactivity. The question this project rises is whether there could be a mechanism that could halt obesity and NCDs epidemics from the inner of

society. Catarina Goulao proposes a model where consumption norms affect the dynamics of an epidemic of NCDs. First, she will model the epidemics of NCDs by allowing adulthood consumption choices to impact their health capital, which is in part inherited by their offspring and affects their probability of developing a NCD. This mechanism gives rise to an intergenerational externality that would be at the origin of high prevalence levels of NCDs. Then, an additional layer of externality is introduced by allowing for consumption comparisons across cohorts. Individuals learn from previous generations their reference group and what they are expected to eat. This mechanism might counterbalance the former intergenerational externality leading to lower levels of NCDs. Fiscal policies alone or combined with public policies regarding eating comparisons, i.e., consumption norms, can be used to internalize externalities and restore optimality.

4. Social LTC insurance with different sources of dependence by Pierre Pestieau

The need for LTC will increase significantly for those aged 80 and over, and in particular for older women who live longer. LTC economists tend to consider dependence as a one-dimensional reality, whose only variability would be its severity. In reality, there are different sources of old age dependence. Among these sources, one can cite age-related disabilities from chronic diseases such as pulmonary disease and diabetes, age-related loss of hearing, sight and movement (arthritis), cognitive illnesses such as dementia and Alzheimer. It is important to take into account this heterogeneity. Medical and nursing treatment can vary from one type to another. And social policy can also vary from one type to another. Consider the natural distinction between chronic diseases and dementia. It would seem that the former requires a much more medical approach than the latter. Secondly, if dementia were to affect higher social categories than chronic diseases, one would expect them to benefit less from public support. In this research project, Pierre Pestieau would distinguish between forms of dependency based on the HRS and SHARE panel studies and show how each of them is distributed across the income scale. Then, in a second step, he would develop a theoretical model of social LTC insurance that takes this distinction into account.

5. Bequests, mortality and dependence by Pierre Pestieau and Emmanuel Thibault

Bequest planning can be affected by longevity in two ways. First, in case of premature death, parents involuntarily bequeath the saving they have accumulated for their old days besides what they were intending to transmit to their heirs. Children whose parents pass away prematurely inherit relatively more. Second, in case of disability calling for long-term care (LTC) parents have to deplete their wealth including what they had planned to leave to their children. Empirically, it would be nice to study if the level of bequests depends on these two events, early mortality and disability. Theoretically, Pierre Pestieau and Emmanuel Thibault would study the possibility of using policy tools to maximize the generational steady state utility. Among the instruments they would consider a social LTC insurance and taxes on bequests that could be contingent on whether the parents had a short life or a life with disability.

6. The timing of intergenerational transfers by Helmuth Cremer, Jean-Marie Lozachmeur, Pierre Pestieau and Emmanuel Thibault

The well-known “rotten kid” theorem stipulates that an altruistic parent need not engage in strategic behavior in order to induce his child to maximize family income. As the child's action (like helping his parent) depends on the transfer received, its action internalizes the impact on the family outcome. However, for this theorem to hold, the transfer must be made after the child has chosen his actions. Using a model in which both parents and children are altruistic towards each other, the research team conducting this project wants to study inter-vivo gifts

and bequest decisions together with informal care when the timing of bequest and children's aid follows the following sequence: in a first stage parents choose their inter vivo gift; in a second stage, children determine their level of informal care; and finally the parent chooses a bequest. Ultimately, the research team plans to study how the introduction of formal LTC insurance modifies the timing of transfers and the level of informal care.

7. The differential taxation of inter-vivo gifts and bequests and LTC insurance by Helmuth Cremer, Jean-Marie Lozachmeur and Pierre Pestieau

Inter vivo gifts and bequests usually do not face the same tax treatment. In most countries, the taxation scheme on intergenerational transfers favors inter vivo gifts. In this project, the researchers plan to study the optimal tax rates on these two kinds of transfers, and their relation to long term care insurance. In a first pass, they will take the existence of a longterm care insurance contract as given and focus on the optimal differentiated tax treatments of inter vivo gifts and bequests. Their approach will take into account two important dimensions often neglected in the literature. The first aspect is related to the timing of the transfer. While inter vivo gifts target a relatively “young” generation in need of liquidity, the bequest is usually expected to be received later in life (around the retirement age). Another important difference is that these two kinds of transfers may be motivated by different donor's objectives. As an example, the inter vivo gift may be motivated by parents' altruism while bequests are motivated by joy of giving. In a second pass, they plan to analyze the impact of LTC insurance contracts on the optimal differential taxation of inter vivos and bequests.

8. Worker's motivation and quality of care in nursing homes by Helmuth Cremer

The supply side of formal Long-Term-Care and particularly the organization of the nursing home sector has been mostly neglected in the literature. We take a first step to fill this gap. A striking feature of this sector is that public, for profit and nonprofit providers typically coexist, and compete for patients and nurses. Helmuth Cremer considers a setting with two nursing homes which can be either for profit or nonprofit organizations. Nursing homes differ in two quality dimensions: “hotel” quality and quality of care, which depends on the motivation of nurses hired. Nurses differ in their intrinsic motivation for working in a retirement home and for any of them motivation is higher when they work for a nonprofit organization. Helmuth Cremer plans to determine the equilibria achieved under various configurations and compare their welfare implications. He is particularly interested in determining conditions under which a mixed market is optimal.