EDITORIAL

TSE founder Jean-Jacques Laffont promoted an approach to research combining theory and facts in pursuit of the common good. His scientific and humanist values continue to shape the way in which TSE engages with private corporations and public institutions.

STANDING ON THE SHOULDERS OF A GIANT

The TSE-Partnerships Foundation (TSE-P) helps to advance and transmit knowledge in economics and related disciplines to address today’s societal challenges. Following in Jean-Jacques’ footsteps, TSE researchers involved in research partnerships aim to empower decision-makers with the scientific knowledge and tools to identify and implement well-informed, impactful decisions.

We are deeply grateful to our partners who have supported TSE over the years and pushed TSE research beyond the frontiers of current knowledge.

In a new condensed format, this annual report celebrates a busy year of productive interactions with decision-makers. It is divided into four main sections:

“2022 AT A GLANCE” including key figures, an overview of recent highlights, and Nobel laureate Jean Tirole’s thoughts on the development, strategy and ambitions of research partnerships;

“PARTNERSHIP IMPACT: RESEARCH ADVANCES & OUTREACH”, sharing key research advances and outreach activities stemming from our partnerships, as well as TSE’s special efforts to engage with regulators;

“OUR RESOURCES: RESEARCH PARTNERS & PEOPLE”, offering an overview of our partnerships and research teams;

and “RESEARCH PARTNERSHIPS IN THE TSE ECOSYSTEM”, sharing additional opportunities for our partners to support and benefit from TSE activities.

Many thanks to the partners and research teams who have worked hard to make 2022 a successful year for research and outreach. Let’s develop research partnerships in the same spirit as we face the challenges ahead. We have high expectations for 2023!

Yassine Lefouili,
Director, TSE-Partnerships Foundation (TSE-P)
Professor, Toulouse School of Economics (TSE)
2022 at a glance

KEY FIGURES

33 partners (corporations, institutions and foundations)

- 11 new or renewed partnerships in 2022
- 9 partnerships now running for 10 years or more
- 65% of partnerships agreed for 3 years or more

126 researchers involved in partnerships

€5M dedicated to research projects and centers

6 research centers (platforms for developing partnerships)

91 scientific publications offering guidance for decision-makers

18 workshops and conferences organized with the support of research partners

SNAPSHOT OF 2022

An intense year, marked by major scientific advances and events promoting research and outreach in a wide range of economics fields: digital, energy and climate, sustainable finance, health, competition policy and regulation.

APR

TSE, April 7–8
Postal economics in the digital age
How should regulation of the postal sector respond to Big Tech dominance and environmental concerns? The 11th edition of the Postal Economics Conference, part of an ongoing partnership between TSE and La Poste Groupe, addressed many of the digital, media and e-commerce challenges facing society today.

MAY

TSE, May 12–13
Partnership with the Tobin Center at Yale
As policymakers around the world confront the difficult issues about how to regulate large digital platforms, the TSE Competition Policy & Regulation Center and the Digital Economy Project at Yale’s Tobin Center for Economic Policy convened top researchers to advance our understanding of digital markets and provide practical insights for policy. The program also included discussions with guest speakers from Microsoft and the European Commission.

TSE, May 18
Initiative for Corporate Climate Action
Sponsored by Getlink (formerly Groupe Eurotunnel), TSE launched a two-year research and exchange project to study the effectiveness of corporate climate action.
**MAY**

**TSE, May 19**

*Networking with partners at the Common Good Summit*

Debates at the Summit this year focused on climate, inflation, transport, aging and AI with prestigious speakers including three Nobel laureates, EU Commissioner Margrethe Vestager, as well as industry leaders from Amazon, AXA, BNP Paribas and many more. Our partners were invited to join the speakers at a private cocktail party at the end of the first day.

**Seville, July 8**

*Strengthening links with the European Commission*

A one-day workshop, organized by the Joint Research Center (JRC) of the European Commission and TSE, brought together academics, policymakers, and practitioners who discussed the latest developments on liability in digital economy. The two central topics tackled by the speakers and panelists (including a representative from Meta) were AI & liability, and platform liability.

**JUL**

**Brussels, October 27**

*TSE brings together national competition authorities*

With the help of the Belgian Competition Authority, the TSE Competition Policy & Regulation Center organized a workshop bringing together four chief economists from national competition authorities in Europe and four TSE faculty members. This was an occasion for informal discussion and brainstorming about antitrust-related topics of interest to policymakers and practitioners such as competition policy and inflation, net neutrality and fair cost sharing, and sustainability.

**OCT**

**TSE, October 20-21**

*Managing risk in the 21st century*

What are the best tools for managing risk, from climate change to aging populations and pandemics? How should we regulate insurance markets in the interests of consumers, firms and society? The SCOR-TSE Conference showcased some of the latest attempts by economists to answer such questions. The SCOR “Risk Markets and Value Creation” Chair, which supplements the work of the TSE Sustainable Finance Center, has supported on the regulation of insurance markets and risk since 2008.

**NOV**

**Joining the fight against antibiotic resistance**

TSE researchers revealed the first results of a research project which aims to identify new economic models adapted to innovations developed in the antimicrobial resistance sector. They showed that transferable exclusivity vouchers can be implemented at the EU level in a timely fashion while avoiding free riding. These results benefited from many interactions between researchers and other actors within the ecosystem.

**DEC**

**TSE, December 15-16**

*Research in support of financial inclusion*

The winning research teams of the first FIT IN Initiative's call for projects met in Toulouse and shared their findings at a workshop on mobile money. Part of a four-year project funded by the Bill & Melinda Gates Foundation, this was another important step towards building an international research community committed to constructively influence the design and regulation of interoperable digital financial services in poorer countries.
Scientific Director of TSE-P, Jean Tirole shares his thoughts on the year’s highlights and on the challenges for research partnerships at TSE.

What is your overall assessment of 2022?
In 2022 we expanded our efforts to produce and share cutting-edge research findings on issues of critical interest to our governments and economic players. For example, in both the debate around the energy crisis and the global fight against antimicrobial resistance, TSE researchers mobilized the results of research conducted over several years and developed under the impetus of our private and public partners. High-level research requires time to develop so it is important to identify impending questions in advance to make it as relevant as possible. In times of crisis, we have demonstrated our ability to inform public debate and decision-making.

In this context, what are your key concerns for TSE?
TSE strives to attract the best researchers in a global context dominated by intense competition among universities. Fortunately, our research partnerships and public and corporate support help to make TSE increasingly attractive to the best international researchers. In addition to new intellectual challenges, research partnerships bring in funding that is essential for making long-term investments in human capital. By human capital, I mean both researchers and the staff that provide them with an optimal working environment in which their research can thrive. Besides funding, partnerships often suggest innovative research fields that had been neglected in academia. Sustaining and developing research partnerships over the long term is therefore a strategic choice for our institution.

Equally important is the preservation of TSE scientific integrity. The lasting success of TSE research partnerships is built upon high ethical standards. As stated in our charter, the originality, objectivity, non-partisanship and scientific rigor of the research undertaken by researchers at TSE are among its most important assets. The credibility of TSE’s research hinges on its independence, its ability to freely publish, and the validation of much of this research in top peer-reviewed academic journals. It’s our duty as researchers to never let our guard down.

A word about the future?
In the coming years, TSE will aim to strengthen its already solid bond with decision-makers. Our ongoing collaborations with actors from the business world and public institutions will be key to the future development of TSE. As our students and programs gain further visibility and our reputation for education becomes as international as it is for research, we will also be able to rely more on our growing community of alumni, which is an incredible opportunity for TSE.

On a different note, I would be happy to see more research partnerships in development economics. This field was dear to Jean-Jacques Laffont and TSE has been collaborating with the French Development Agency for many years. Thanks to the support and guidance of the Bill & Melinda Gates Foundation, we have expanded our expertise in this field with the FIT IN Initiative, and I hope that we will continue to do so. Without overstretching our human resources, I would also like us to continue to diversify the pool of partners. It’s an efficient way to identify innovative research topics at an early stage and to leverage our impact on a variety of issues.

Lastly, we can expect a very positive impact on research partnerships from TSE’s increased autonomy as it takes on Grand Etablissement status, and from the integration of IAST, our interdisciplinary sister school, among TSE’s research departments. In the future, we should be able to even more easily put together multidisciplinary and interdisciplinary research teams for research partnership projects. We should also aim to involve more practitioners in the training of our students to better prepare them for the challenges ahead. I am convinced that we must be able to rely on our community of research partners to achieve this goal.

I could sum it all up in one sentence: working together makes a real difference!
The research developed in the framework of bilateral research partnerships is usually linked to TSE research centers. Rather than detailing each bilateral project and initiative, this section showcases the impact of our partners’ support through the lens of our Centers.

**TSE Research Centers**

TSE’s first research center was launched in 2017. Other centers have since emerged, bringing the total to six.

**Objectives of the Centers**

- Bring together TSE’s scientific expertise within a given area
- Organize TSE’s contribution to public debate
- Facilitate relations with partners and policymakers

**Digital Center**
Leading the way in digital economics research

**Health Center**
Enabling health economics research to flourish

**Sustainable Finance Center**
Exploring the world of sustainable finance

**Energy & Climate Center**
Rising to environmental challenges

**Infrastructure & Network Center**
Building infrastructure and networks

**Competition Policy & Regulation Center**
Sharing our expertise with regulators
TSE Digital Center was created in 2018, as a continuation of the Jean-Jacques Laffont Digital Chair. Its teams develop research aimed at improving the understanding of the opportunities and risks of the digital economy. The Center’s research areas include analytics and economics of Big Data, AI and society, digital platforms, financial technologies and digital market, and intellectual property in the digital economy.

In many ways, 2022 was a year of consolidation for TSE Digital Center: a time to build on past achievements and focus on producing and delivering research results for more people. The dialogue between TSE researchers and decision-makers from the public and private sectors has intensified over the last year in the context of the proposed Digital Markets Act. At the same time, as part of the Center’s commitment to anticipate the future needs of society, much of our attention has also been devoted to identifying ground-breaking issues in the field of digital economics, from industrial data-sharing to economic issues related to cloud computing.”

Christophe Bisière and Jacques Crémer* Co-directors, TSE Digital Center

* Former Scientific Director of TSE Digital Center, Jacques stepped in as Co-director in February 2023, replacing Bruno Jullien who led the Center alongside Christophe for three years.

Key numbers for 2022

13 articles in peer-reviewed journals
8 working papers
61 researchers
34 scientific events for a total of 1,220 attendees
11 related partnerships
Artificial Intelligence and society

Our objective is to investigate the ethical expectations that citizens and consumers hold to smooth the transition to the new AI society. We conduct research in the high-stakes domain of algorithmic justice and study areas in which AI and powerful algorithms can redesign the social fabric.

Program leader: Jean-François Bonnefon

Financial technologies and digital markets

This program analyzes the implications of key features of FinTech and cryptocurrencies, and their impact on social welfare. We study the design of markets, institutions and regulations to mitigate coordination problems, information asymmetries and other market failures.

Program leader: Christophe Bisière

Digital platforms

Research in this program is centered on understanding the business models of platforms and their impact on society and welfare. We hope to shed light on the functioning of platform markets and offer policy recommendations regarding the regulation of such markets.

Program leader: Doh-Shin Jeon

Would you let a machine score your morals?

Attitudes to artificial intelligence swing quickly from excitement to dystopian dread. TSE Digital Center provides a more measured response, helping regulators to consider the social acceptability of digital technologies and ethical concerns about privacy, surveillance, and discrimination. In this paper, Zoe Purcell and Jean-François Bonnefon suggest that applications such as AI social scoring will run into persistent psychological barriers.

Program leader: Jean-François Bonnefon

What is the fundamental value of cryptocurrencies?

Do the high market valuations of cryptocurrencies reflect their fundamental value or speculation? Is their volatility caused by irrational investors? Bruno Biais, Christophe Bisière, Matthieu Bouvard, Catherine Casamatta and Albert Menkveld investigate the impact of transactional costs and benefits, as well as extrinsic volatility, on cryptocurrency prices.

Program leader: Christophe Bisière

Does social media deliver bad news?

The explosive rise of social media is reshaping the news, for both producers and consumers. Alexandre de Cornière and Miklos Sarvary examine platforms’ role as aggregators and curators of online content. In particular, they analyze the implications for news quality.

Program leader: Doh-Shin Jeon

Intellectual property in the digital economy

The goal of this initiative is to offer a better understanding of intellectual property protection and transfer in the digital economy. We analyze patent litigation involving IoT players and the licensing of intellectual property to manufacturers of connected devices. Our researchers assess the economic effects of making platforms liable for intellectual property infringements by third-party users.

Program leader: Yassine Lefouili

Optimizing portfolio returns while managing risk

How can investors best allocate resources given the risk of occasional catastrophic losses that spark financial crisis? Conditional value at risk (CVaR), also known as expected shortfall, quantifies this risk by taking a weighted average of extreme losses in the tail of possible returns. Using a “stochastic mirror descent” algorithm, Sébastien Gadat, Manon Costa and Lorick Huang solve the problem of optimal portfolio allocation with CVaR constraints and sophisticated financial assets in a context of streamed data. Their approach allows them to build online the Markovitz efficient frontier (CVaR vs Optimal return) associated with the portfolio optimization problem.

Program leader: Sébastien Gadat

Analytics and economics of Big Data

With the help of mathematicians, our economists develop optimization techniques, applied econometric tools and game-theory concepts that help us to handle high-dimensional random phenomena. We study data-related issues such as privacy protection, data markets, and the impact of data on competition.

Program leader: Sébastien Gadat

Should platforms block sellers of fake goods?

Should e-commerce giants like Amazon and eBay be held to account for illegal knock-offs sold by third parties on their platforms? Doh-Shin Jeon, Yassine Lefouili and Leonardo Madio investigate the impact on innovation and consumers of forcing platforms to ban third-party sellers who break intellectual property laws.

Program leader: Yassine Lefouili

Would you let a machine score your morals?

“Humans Feel Too Special for Machines to Score Their Morals”, TSE Working Paper n° 22-1387, November 2022

What is the fundamental value of cryptocurrencies?


Does social media deliver bad news?

“Social Media News: Content Bundling and News Quality”, Management Science, vol. 69, n° 1, January 2023

Optimizing portfolio returns while managing risk

“Portfolio optimization under CVaR constraint with stochastic mirror descent”, TSE Working Paper n° 22-1342, June 2022
TSE researchers participated in a wide range of expert groups in 2022. For example, Doh-Shin Jeon has been an active member of the expert group of the European Commission’s observatory on the online platform economy. Also at the European Commission, Jean-François Bonnefon was an advisor in the steering committee of an initiative on Meaningful and Ethical Communication, created to examine the relationship between online technologies and political behavior, as well as understanding values and identities. Yassine Lefouili acted as an expert for the European Commission in the context of the Digital Services Act. On a national level, Jacques Crémer served on the scientific council set up by France Stratégie to evaluate the consequences of the French plan to subsidize access to high-speed internet (PFTHD).

Our researchers have also been involved in many policy-related events. A notable example was Jacques Crémer, who chaired a roundtable at a Ministry of Finance event organized in February to mark the French presidency of the European Union. Participants included Commissioner Margrethe Vestager, Brad Smith from Microsoft, and Cedric O, the French Minister in charge of Digital affairs.

Keynote presentations
We could not hold the 15th Digital Economics Conference in January 2022 because of the pandemic. The organizers decided to maintain two presentations, delivered online on January 14. These sessions were well attended and positively received by a global audience. Drawing on his research on innovation and firm performance, John Van Reenen (London School of Economics) examined the rise of superstar firms. Combining economics and computer science, Giacomo Calzolari (European University Institute) focused on the recommendation technologies exploited by many of the 21st century’s new behemoths.

In 2022 we welcomed speakers from very different horizons. In June, for example, Ariel Pakes (Harvard) presented his work on AI pricing algorithms and Stefan Hunt (UK Competition and Markets Authority) gave a talk on the digital transformation of competition and consumer agencies.

Daniel Ershov (TSE)
Co-organizer of the workshops

11 digital workshops
Organized by Daniel Ershov and Doh-Shin Jeon, these workshops covered a broad range of topics such as AI, cybersecurity, privacy and data, digital platforms, social media and fintech. Attracting a broad group of faculty and PhD students, the workshops also offer a framework for interactions with practitioners in the private sector and researchers in various disciplines. In addition to giving talks, speakers have opportunities for one-on-one meetings with TSE researchers working on digital markets, big data and AI.

Many thanks to my co-chairs Andrei Hagiu (Boston University) and Julian Wright (National University of Singapore), and all members of the scientific committee for their commitment to making this seminar series a success. Among this year’s speakers, we had the pleasure to welcome Ben Casner (Bureau of Economics, Federal Trade Commission) for a presentation on content-hosting platforms in March.

Jacques Crémer (TSE)
Co-chair of the seminars

19 seminars on the economics of platforms
Hosted by TSE Digital Center, these virtual seminars covered all aspects related to platform economics including competition, strategy, design, governance, and policy issues.

Other scientific events
TSE Digital Center has also collaborated with other TSE Centers in the organization of scientific events, some of which are presented in other sections of this report.

Yale-TSE Regulating the Digital Economy Workshop
TSE, May 12–13

Workshop on Mobile Money Interoperability with the FIT IN Initiative
TSE, December 15–16

JRC-TSE Workshop on Liability in the Digital Economy
Seville, July 8

17
In 2022, the TSE Digital Center awarded a scholarship to Luise Eisfeld. Her main areas of expertise are empirical industrial organization and the economics of digitization.

"In my thesis, I study competition and innovation in the context of digital markets. More broadly, I explore the implications of digitization for market outcomes and welfare."

Luise Eisfeld

Common Good Summit

The latest edition of the Summit, organized by Challenges magazine and TSE in Toulouse on May 19–20, included two sessions focused on digital issues:

“"When digital goes a click too far"”
Jean Tirole (TSE) and Margrethe Vestager (European Commission) exchanged ideas in a debate on how best to regulate the digital world. Their discussion gave credit to the pioneering role of Europe with the Digital Services Act, Digital Markets Act, and the General Data Protection Regulation (GDPR), and underlined the need for regulation on a global scale.

“AI: Opportunity or threat?”
How do we harness the potential of digital technologies to serve the common good? Should there be limits to the collection and sharing of personal data? How can we regulate the “innovation machine” without breaking it? These were some of the key questions discussed by Jean-François Bonnefon (TSE), Marc-Antoine Dilhac (University of Montreal) and Didier Mamma (Vice-President of Data Value Creation, Decathlon).

Crossing Channels podcast

Crossing Channels is a monthly podcast series produced by the Bennett Institute for Public Policy (Cambridge) and Institute for Advanced Study in Toulouse (IAST, TSE’s sister institution) to give interdisciplinary answers to today’s great challenges. Three episodes addressed digital topics in 2022.

Can AI be ethical? (S 1, Ep 3, January): Jean-François Bonnefon and Daniel Chen (IAST) joined Diane Coyle (Bennett Institute) to discuss why we need to care about the morality of artificial intelligence (AI) and whether there is a double standard for AI and humans.

Broadband before bridges: Can digital technologies leapfrog the obstacles to development? (S 1, Ep 4, January): Stephanie Diepeveen, Rehema Msulwa (Bennett Institute), and Stéphane Straub (TSE) considered emerging digital divides and the impact of American and Chinese tech giants on development.

Has digital technology made us better off? (S 2, Ep 1, October): Diane Coyle (Bennett Institute), Jacques Crémer (TSE), and Jean Tirole (TSE-IAST) explore why the era of smartphones and social media has also been an age of sluggish economic growth.

Partners for specific research projects

Airbus, Amazon, Ant Group - Luohan Academy, BBVA, Bill & Melinda Gates Foundation (for the FIT IN Initiative), Huawei, Orange, Causality Link, La Poste Groupe, Meta, Microsoft.
SE Energy & Climate Center was set up in 2017 to promote research in energy and climate economics. Its aim is to take research one step further and use scientific findings to guide policy in the energy sector and inform decision-making related to environmental issues such as climate change. This research implies knowledge sharing on the institutional framework, empirical observations, and basic theoretical modelling. Research at the Center revolves around the economics of energy industries and the economics of natural resources and the environment.

"In 2022, our economists produced world-class research on energy and environment issues. We strengthened the TSE Energy & Climate Center’s reputation and our connections with other researchers in the field by inviting them to Toulouse and participating in high-level academic networks in environmental and energy economics. In the context of the energy crisis and climate events of 2022, the Center has worked hard to share insights into the economics behind pressing questions related to energy prices and climate goals. Our members have been extremely active participants in the public debate, with regular contributions to the media and outreach events. We intend to continue in the same dynamic in 2023."

Stefan Ambec
Director, TSE Energy & Climate Center

Rising to environmental challenges

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<th>Key numbers for 2022</th>
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<td>13 articles in peer-reviewed journals</td>
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<td>12 working papers</td>
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<td>48 researchers</td>
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<td>23 scientific events and a total of 558 attendees</td>
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<td>5 related partnerships</td>
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The economics of energy industries

Our researchers investigate how the energy transition modifies energy markets and the industrial organization of the sector. We identify market designs and pricing mechanisms that insure a reliable supply of clean energy for electricity provision and transportation. We also focus on wholesale and retail markets, network tariffs and international trade.

Supergrids need the power of cooperation

Rampant energy prices and Russian aggression, coupled with the threat of climate catastrophe, have heightened the pressure to improve energy efficiency. The TSE Infrastructure & Network Center supports research on how to achieve such gains by sharing access and long-term investments in utilities. International electricity networks offer great promise but Claude Crampes explains that reaping their full benefits will require coordination to go far beyond the physical construction of cross-border links.

Is it time to tax meat?

Despite the huge impact of the meat industry on the environment and our health, governments have paid little attention to its unsustainable global trajectory. To help policymakers evaluate the tools they might use to steer firms, innovators, and consumers on to the path of the green transition, Nicolas Treich and his coauthors review the empirical evidence on the true costs of livestock farming and examine the politically charged case for taxing meat consumption.

Can Europe plug its carbon leaks?

How can the EU pursue ambitious net-zero targets without fueling carbon emissions overseas? This report by Stefan Ambec, Director of TSE Energy & Climate Center, provides an economic analysis of its proposed Carbon Border Adjustment Mechanism (CBAM). He discusses the likely impacts of the policy and some of the challenges regulators still need to address.

Can the precautionary principle light the way ahead?

As our actions continue to heat the planet, we may trigger tipping points that accelerate the onset of climate catastrophe. Examples include the collapse of the West Antarctic ice sheet, or mass die-off of coral reefs. Faced with such risks, the precautionary principle has often been invoked as a guide to decision-making. It suggests we should refrain from undertaking any action if there is no proof it would not harm future generations’ well-being. Louise Guillouët and David Martimort examine possible foundations for this principle in a world of irreversible risks, limited information and opportunists.
20 environment economics seminars

Featuring both theory and empirical work, the seminar series covered issues such as the impact of climate change on capital and labor allocation, the substitutability of primary and secondary forests, and the design and evaluation of public policies.

"Presentations at the seminar addressed major issues in environmental economics. Presentations at the seminar addressed major issues in environmental economics. For example, Mar Reguant from Northwestern University presented her work on the dynamic impact of market integration. She showed how expansions of Chile’s electric grid led to the connection of new renewable energy capacity. That came with reduction in generation cost and CO2 emissions. Interestingly, the renewable investments anticipated the connection and the effect of market integration would have been underestimated by classical empirical methods."

Anouch Missirian (TSE) Chair of the seminars

13th Conference on the Economics of Energy and Climate

On June 15-16, the Center hosted the biennial energy and climate academic conference, gathering internationally renowned economists in Toulouse. In keeping with the spirit of previous years, the conference featured theoretical, empirical, experimental and policy-oriented contributions, with the participation of the Center’s partners. Over 37 academic presentations covered a vast spectrum of topics including organization of energy markets, climate policies and finance, renewables and network reliability, subsidies in energy markets, electricity prices, air pollution, and carbon pricing. The conference featured two keynote speeches: Natalia Fabra (Universidad Carlos III de Madrid) explained the efficiency and distributional implications of real-time pricing for electricity, while Tatyana Deryugina (University of Illinois) presented research on the number of lives saved by reductions in fossil fuel use. This conference was organized with the support of the EU-funded GEOCEP project.

Energy workshop

This workshop is organized by TSE, Universidad Carlos III (UC3) and the Barcelona School of Economics. In 2022, it was UC3’s turn as host, welcoming energy economists from all three institutions to Madrid on March 23-24.

5th Conference on Econometric Models of Climate Change

After England, Denmark and Italy, France was chosen to host the 2022 Conference on Econometric Models of Climate Change. Organized with the support of the French Environment and Energy Management Agency (ADEME), the Conference took place on August 25-26 at TSE, promoting an interdisciplinary approach to the detection and attribution of climate change, knowledge exchange between climate science, economics and econometrics, and econometric estimates of climate impacts and policy evaluation.

Christian Gollier is a member of the independent Franco-German Council of Economic Experts (FGCEE) which supports the coordination of economic policy to promote convergence between the two countries and improve the competitiveness of their economies. The Council meets regularly to discuss and make recommendations to the German and French governments on bilateral topics including energy and climate policy, digitization, artificial intelligence, and innovation and industrial policy. Christian also spoke at a Zoom roundtable on “The Sustainability Transition in Europe and Opportunities for Australia” organized by the Australian France Business Association and the German Australian Business Council in March.

In 2022, Christian Gollier also served on the scientific committee of the Citizens Climate Lobby.

Stefan Ambec gave a presentation on “The energy transition with intermittent renewables” at the online seminar of the DG Energy Chief Economist (European Commission).
In addition to outreach events organized by TSE, our researchers spoke at several conferences. For example, at Futurapolis, an event dedicated to ecological innovation and organized by Le Point magazine and Toulouse Métropole on November 24–26, TSE’s Ingela Alger shared the floor with Laurent Terray (Cerfacs, Toulouse), Guillaume Martinaud (Chair of Orpi real estate network and co-author of the 6th GIEC report) and Nicolas Misiak (Toulouse city council) to discuss the measures and sacrifices required to save the planet. Christian Gollier, meanwhile, joined Marc Benayoun (EDF) to answer the question “Can frugality be happy?”.
Enabling health economics research to flourish

TSE expanded its footprint in the field of health economics by creating TSE Health Center in 2021. This Center encourages research projects with a view to improving quality and access to care both in France and worldwide. The research projects developed under the aegis of the Center fall into five main areas: pharmaceutical industry and regulation, innovation in health, public healthcare, long-term care & aging, food & healthy behavior economics, and economics of pandemics.

"The past year has been an intense one for the Center. Researchers spared no effort to produce quality research and respond to urgent health issues such as antibiotic resistance and obesity... This year, more than ever, we have developed our scientific work while maintaining a regular dialogue with stakeholders in the health sector. Public institutions, industries and health professionals have been our main interlocutors. The number of TSE economists interested in health issues, initially limited to a small core, has increased in 2022. Health is an exciting field for economists!"

Pierre Dubois
Director, TSE Health Center

**Key numbers for 2022**

- 5 articles in peer-reviewed journals
- 13 working papers
- 1 scientific event with a total of 75 attendees
- 5 related partnerships
- 26 researchers
RESEARCH ADVANCES & OUTREACH

Pharmaceutical industry and regulation

Researchers involved in this program seek to provide the best trade-off between maintaining incentives to innovate (with high rewards to new useful medicines) and financing health care expenses. We study how regulatory rules impact profitability and welfare in an international context, and analyze the role of marketing authorizations, detailing effort in fostering access and diffusion of medicines.

Program leader: Pierre Dubois

Public healthcare, long-term care, and aging

This program aims to offer a better understanding of the complex relationships between the different actors in this sector: patients, insurers, and care providers including practitioners, hospitals, or the pharmaceutical industry. Researchers also study the different forms of financing expenses related to aging and age-related dependency.

Program leader: Jean-Marie Lozachmeur

Innovation in health

Research work developed in this area is focused on incentive and privacy issues. It includes the design of analytical models and the testing of predictions with existing empirical and experimental data.

Program leader: Philippe De Donder

Will reference pricing make US drugs affordable?

Joe Biden’s Build Back Better Act is the latest in a long line of attempts by US administrations to make pharmaceutical drugs cheaper for its citizens, by capping US prices according to levels set in other countries. Pierre Dubois, Ashvin Gandhi and Shoshana Vasserman demonstrate how international reference pricing rules may ultimately raise prices in referenced countries much more than they will decrease prices in the United States.


How should consumers pay for health insurance?

When healthcare providers have monopoly power, the policies of competitive insurers can push up prices for medical goods. In this context, Helmuth Cremer and Jean-Marie Lozachmeur show that consumers benefit when insurers compete on copayment rates (based on the value of healthcare received by the patient) rather than coinsurance rates (based on the quantity of received care). This research provides strong support for reference pricing.


Can patent extensions save us from the antibiotic crisis?

Antibiotic resistance is a serious global public health problem with significant costs, both in terms of human lives and the financial cost of care for society. Supported by TSE Health Center and the ARPEGE project, Pierre Dubois, Paul-Henri Moisson and Jean Tirole highlight the mechanisms and levers that can encourage innovation in the antimicrobial resistance sector.


Food and healthy behavior economics

Researchers involved in this program study the determinants of food behavior with special attention given to the role of socio-economic factors, peer effects, food availability and prices, and the environment. Our work helps assess the impact of food policies on health and social welfare and understand how businesses and markets respond to policies.

Program leader: Céline Bonnet

Economics of pandemics

The purpose of this program is to identify the consequences of health crisis and the optimal public investment policy to face them. Researchers involved study the cost-benefit issues of the different public policies, as well as the factors of individual behavior and responsibility that influence compliance with public health recommendations. They also investigate the commercial and pricing regulations that should be put in place in a context of drug shortages and increasing demand for care.

Program leader: Nour Meddahi

Will Covid-19 change the way we care for the elderly?

Covid-19 outbreaks at nursing homes may have had lasting impacts on our ideas and decisions about old age, with major implications for savings and long-term care policies. Bertrand Achou, Philippe De Donder, Franca Glenzer, Minjoo Lee and Marie-Louise Leroux find that 72% of Canadian respondents are less inclined to enter a nursing home because of the pandemic. This aversion to nursing homes encourages saving for old age and support for subsidizing home care.

“How does our living environment impact obesity?”

Obesity has nearly tripled since 1975, becoming one of the world’s leading risks of death. Almost a fifth of French adults are obese. Addressing such problems requires careful analysis of the interplay of individual, corporate and societal choices about healthcare, nutrition, and our living environment.

Céline Bonnet, Cécile Detang-Dessendre, Valérie Orozco, and Elodie Rouvière take up the challenge in this study of the impact of food, sports, and health amenities on obesity in France.

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Scientific events

Health Economics workshop

This June 27 event brought together a wide range of researchers and field actors from the health sector to discuss “Innovation, regulation and organization in healthcare”. Organized in Paris by TSE with the help of our partners, the workshop allowed researchers from different affiliations to present recent research advances to an audience of 75 academics and practitioners. Presentations revolved around two main themes:

- **Price regulation, innovation and access to innovative drugs**
- **Healthcare savings sources and better quality of care**

Policy-oriented engagements

TSE researcher Céline Bonnet joined the expert committee on socio-economic analysis at the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), a membership that will run until 2026.

For their research on the economics of antibiotics, a group of TSE researchers has refined its knowledge of the characteristics and properties of the antibiotics market by meeting with a wide range of practitioners. They have interacted with public and private actors in this field, including members of the ARPEGE consortium (the biotech Antabio, bioMérieux, the Hospices Civils de Lyon), and the antibioresistance taskforce within the Comité Stratégique de Filière des Industries et Technologies de Santé (CSF ITS) which receives support from the French Conseil National de l’Industrie. These exchanges accelerated in 2022, as the fight against antibiotic resistance was made one of the priorities of the French Presidency of the Council of the European Union.

Conference on “(Re)inventing the economics of medicine”

(Paris, June 27)

Gathering a wide audience of practitioners from the pharmaceutical industry with the help of LEEM, the French pharmaceutical association, this conference addressed concerns about regulation as well as the funding of innovation in the pharmaceutical sector. TSE’s Jean Tirole and Pierre Dubois shared the stage with high-level speakers from pharmaceutical firms and the insurance sector (such as Amgen, Agipharm, Fédération Nationale de la Mutualité Française, Roche France, and Sanofi) including Philippe Bouyoux, who chairs the Comité économique des produits de santé (CEPS) in France.

Symposium on “Research and Innovation to reduce the burden of antibiotic resistance: Strengthening European action”

(Paris, June 7)

In the context of the French Presidency of the Council of the European Union, and with the support of the Ministry of Higher Education, Research and Innovation, Inserm and Institut Pasteur organized a scientific symposium on antibiotic resistance (AMR). Organizations and agencies, public and private research actors, and representatives of EU member states discussed plans to develop research and innovation for the fight against antibiotic resistance. TSE researcher Pierre Dubois participated in a roundtable on antibacterial strategies and the need for new economic models for access and innovation, alongside speakers from the Norwegian Institute of Public Health and the Public Health Agency of Sweden.

Antimicrobial Resistance (AMR) Course – One health

(Veyrier-du-Lac, November 7-11)

This training course, principally targeting audiences from low- and middle-income countries, was organized by the Mérieux Foundation and University of Paris. It aimed to reinforce the critical decision-making of experts in human and animal health, and environmental protection. As part of this intensive course, Pierre Dubois gave a lecture on the economics of antibiotics.

Our researchers contributed to many events organized by key players in the health sector in France and abroad, including partners of TSE Health Center.

From left to right: C. Blachier-Poisson (Amgen France, Agipharm), D. Libault (ENSYS, HCIPPS), P. Bouyoux (CEPS), M. Kyle (Mines ParisTech), P. Dubois (TSE), J.-F. Brochard (Roche France), J. Moisset (LEEM)

P. Dubois (TSE)

P. Dubois (TSE)
Debate: What economic model for the French healthcare industry?

This online debate organized by TSE on January 27 featured the Director of TSE Health Center Pierre Dubois, Eric Baselhac (Director of Economic and International Affairs, Leem) and François Lacoste (Executive Vice President, Research & Development, bioMérieux).

Common Good Summit

“Living with dependency”
TSE’s Catarina Goulão joined Patrick Cohen (AXA France), Laure de la Bretèche (Caisse des Dépôts), and Sylvain Rabuel (Groupe DomusVi) at the 2022 Common Good Summit on May 19 to discuss the upheaval caused by our aging societies.

Health Economics

Award
Céline Bonnet and Pierre Dubois, jointly with eight other researchers, have been awarded the 2021-2022 Gary Lilien ISMS-MSI-EMAC Practice Prize for a study conducted at the request of the French government on the “Effect of front-of-pack labels on the nutritional quality of supermarket food purchases.” This prize aims to highlight and celebrate outstanding marketing science work that has had significant organizational impact.

Partners for specific research projects
bioMérieux, Danone, GIE GERS, LEEM, Urosphere

Encouraging the next generation of health economists
I. Natali (TSE)

Strengthening TSE’s research capacity in health economics is important to ensure the production of high-quality and visible research. This requires the involvement of senior researchers and young talent. Six TSE PhD students have been developing work on health topics in 2022 and, thanks to our partners’ support, TSE Health Center was able to offer a two-year postdoctoral fellowship to Ilaria Natali who joined TSE in 2022 after her PhD at the Université Libre de Bruxelles. Her research focuses on the socioeconomic determinants of drug consumption and health outcomes, the evaluation of policy levers aimed at limiting inappropriate use of pharmaceuticals, as well as the role played by pharmaceutical advertising in the healthcare sector.

More information at www.tse-fr.eu/health
Scan the QR Code
Building infrastructure and networks

Infrastructure development around the world poses ever-changing challenges, including financing, sharing access, and optimizing the often complex and networked underlying structure. The TSE Infrastructure & Network Center was created in 2021 to better understand these issues and provide operational responses. Scientific work developed by the Center’s team revolves around three main lines of research covering challenges related to business strategy, financing, and regulation. The Center addresses these challenges in six areas: construction and housing economics, developing countries, postal and telecom, responsible finance and long-term investments, transport, and utilities.

Key numbers for 2022
7 articles in peer-reviewed journals
16 working papers
53 researchers
4 scientific events with a total of 250 attendees
9 related partnerships

“We have successfully continued the Center’s missions in 2022. TSE teams have been increasingly active in development economics and transport economics. The FIT IN Initiative and our partnerships with SNCF Réseau and the French transport authorities have notably contributed to this dynamic. After years of a worldwide pandemic, we rediscovered the pleasure of exchanging ideas at in-person events organized in Toulouse. Two exciting examples were our postal conference and the conference on the economics of housing.”

Frédéric Cherbonnier
Director, TSE Infrastructure & Network Center
1. Finance and decision theory under uncertainty

Infrastructure and network-based industries need to make considerable and irreversible long-term investment decisions even though the parameters guiding these decisions, particularly regarding the future evolution of costs and demand, are highly uncertain. It may be necessary to curtail or partly postpone projects in order to better adjust to future market conditions, whereas financial decision model need to be adapted when facing very long investment horizon and risk with unknown ‘ambiguous’ probability distributions. These problems concern both private companies and public entities, and implies to refine classical models such as the capital pricing asset model, and its extension based on consumption.

2. Network and spatial economics

In markets studied at the Center, an accurate view of the demand curve and cost structure is crucial, as well as a deeper understanding of the constraints related to network externalities and geographical location. Econometrics analysis is therefore necessary to assess elasticities, economies of scale and scope, as well as the cost-effectiveness frontier, while modelling choices of agents and competitors must allow us to identify the optimal underlying structure.

3. Procurement and regulation

Infrastructures are often essential facilities on which firms depend to reach customers or to continue their activities. Network industries are generally developed by natural monopolies and oligopolies subject to anti-competitive regulation. Public intervention in this area aims to facilitate non-discriminatory third-party access, incentivizing cost efficiency and high-quality service, while allowing financing of current and future activities. Today, the challenge is to define optimal mechanisms that translate into concrete implications with respect to price, access mechanism, and procurement by private contractors on behalf of a public authority.

Housing affordability and housing wealth do not always go hand-in-hand. Apartment prices in many cities have grown faster than rents, leading to regional divergences in price-to-rent ratios. Given the importance of housing both in household consumption and savings portfolios, Tuuli Vanhapelto hopes to shed light on this variation. Using a dynamic spatial model that distinguishes between rents and prices, she shows that urban growth can account for variation in price-to-rent ratios and that, in Finland, trends underlying urban growth have led to important regional divergence in both renter welfare and housing wealth physical construction of cross-border links.

Can consumers encourage sustainable delivery?

Given the dramatic expansion of e-commerce, should delivery operators be required to reveal their emissions? Claire Borsenberger, Helmuth Cremer, Denis Joram, Jean-Marie Lozachmeur, and Estelle Malavolti find that if consumers can observe the level of emissions generated by delivery of their online purchases, their ‘environmental awareness’ can provide operators with an incentive to reduce emissions toward the optimal level. This affects the design of emissions taxes, while regulatory certification would help operators to reveal emissions in a credible way.

How to close the infrastructure gap

How will the world’s poorest countries afford to develop their infrastructure? Marianne Fay, David Martimort, and Stéphane Straub examine whether attracting private investors is the best way to jump-start improvements to key sectors such as transport, water, and energy. Rejecting standard policy narratives, their analysis reveals the benefits of balancing private and public-sector strategies.


Who benefits from variation in house prices and rents?

This research program aims to offer a better understanding of housing occupancy choices and the consumption of housing services, the political economy of social housing construction, as well as macroeconomic analysis of construction.

Program leader: Martial Dupaigne

Postal and Telecom

Researchers working on this initiative provide academic insights into economic models of these sectors. We observe their constant need to adapt to the competitive environment, given the rapid advances in digital technologies and the constraints imposed by regulators.

Program leader: Helmuth Cremer

<table>
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<th>Research advances</th>
<th>Examples of publications in each of the Center’s research areas</th>
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| Developing countries
| We provide academic insights into the development of infrastructure and networks in the specific context of developing countries. These countries suffer from major gaps in access to infrastructure, which raises complex investment and financing issues. |
| Program leader: | Stéphane Straub |

| RESEARCH ADVANCES & OUTREACH |

| INFRASTRUCTURE AND NETWORK ECONOMICS |

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Transport

We aim to address a variety of questions of interest to economists in the transport sector, including regulatory policies, optimal resource allocations, and urban development.

Program leader: Marc Ivaldi

How can cities reduce traffic?
Road traffic is choking the world’s cities, with disastrous consequences for our climate, health, and economies. In the US alone, the annual cost of congestion in lost time, wasted fuel and carbon emissions is estimated to be $87 billion. Optimizing today’s increasingly complex urban transport systems is a key target for the TSE Infrastructure & Network Center. In this paper, Isis Durrmeyer and Nicolás Martínez construct an innovative model to analyze existing efforts to free up our car-clogged streets.


Utilities

Our program seeks to understand the determinants of efficient long-term investments in utilities (water, electricity and gas), confronted with infrastructure aging, decarbonization of economies, extreme climate fluctuations, rapid changes in demand for goods and services, and digitalization of processes.

Program leader: Arnaud Reynaud

How to invest in our future?
Russian aggression and the climate emergency are among the urgent challenges facing Europe today. An effective response will require massive, long-term investments in energy infrastructure. Frédéric Cherbonnier and Christian Gollier argue that such initiatives must adopt a risk-adjusted discount rate to ensure value for money. They show how to estimate this rate for public and private projects, with applications to the electricity sector.


11th Postal Economics Conference

Postponed due to the health crisis, the 11th edition of the Postal Economics Conference was finally held at TSE on April 7-8. It was organized with La Poste Groupe, and discussion revolved around e-commerce, the digital economy and delivery services. On this occasion, we welcomed more than 80 participants to Toulouse, including senior management from La Poste Groupe. This year’s program was quite dense with insightful presentations by 30 academic speakers. The conference ended on high note with a roundtable on “Regulation and Competition Policy to promote a fair and inclusive digital economy”. Chaired by Jean Tirole, this roundtable assembled high-level speakers with a variety of perspectives: Yves-Alexandre de Montjoye (Associate professor, Imperial College London), Laure de La Raudière (Chair, Arcep), Pierre Régibeau (Chief Competition Economist at DG Competition, European Commission), and Philippe Wahl (CEO, La Poste Groupe).

Learn more

Conference on the Economics of Housing and Housing Policies

This workshop was jointly organized by Aix-Marseille School of Economics, Sciences Po Paris and TSE, in Toulouse (June 9-11). The group of researchers leading this initiative was brought together by an ECHOPPE grant on housing economics and policies from the French National Research Agency (ANR). During the workshop, TSE PhD students as well as TSE researchers presented their latest findings. Lisa Botbol presented her work on social housing allocations, Tuuli Vanhapelto shared insights on regional divergence of house prices, rents and expectations. Martial Dupaigne’s presentation focused on building cycles and Frédéric Cherbonnier presented his current work (with Christian Bontemps and Thierry Magnac) on evaluating the impact of transaction taxes on housing.

Other scientific events

Some scientific events supported by the TSE Infrastructure & Network Center are presented in other sections of this report as their research areas overlap with several TSE Centers.

13th Toulouse Conference on The Economics of Energy and Climate
TSE, June 15-16

Workshop on Mobile Money Interoperability with the FIT IN Initiative,
TSE, December 15-16
Our researchers contributed to many policy-oriented events, a few of which were organized or co-organized by public institutions.

8th Conference on Public Policy Evaluation
Paris, December 8
TSE’s Christian Gollier and Emmanuelle Auriol spoke at this conference organized by the French Economic Association (AFSE) and the French Treasury. Christian gave the keynote lecture on “How to do ex ante evaluation under uncertainty” and Emmanuelle, who also chairs the AFSE, gave the closing speech. This annual conference aims to gather contributions on the quantitative analysis and evaluation of public policies.

Socio-economic evaluation of public investments conference
Paris, September 22
The General Secretariat for Investment and France Stratégie, in partnership with the National Agency for Radioactive Waste Management (Andra) and the General Inspectorate for the Environment and Sustainable Development (IGEDD), organized a one-day conference to explore these issues, including consideration of their impact on society, the limits of economic expertise in the face of uncertainty, and the place of socioeconomic assessment in public decision-making. Frédéric Cherbonnier was invited to speak at a roundtable on the following question: “Where to place the cursor between uncertainty and/or probability, ambiguity and subjective probabilities?”

Contributions to the public debate
Common Good Summit
“The future of urban transport”
A session of the 2022 Common Good Summit organized by Challenges magazine and TSE in Toulouse in May discussed the future of urban transport. Frédéric Duval (Amazon), Marc Ivaidi (TSE), and Thierry Mallet (Transdev) offered contrasting perspectives on how we can reinvent public transport, reduce the impact of deliveries, and embrace sustainable mobility.

The roundtable highlighted initiatives that seem to show companies are willing to go beyond the current regulation, which is positive news for the fight against global warming. It may be in the operator’s interest to set up virtuous systems because they will have the support of public authorities. It is also important for companies to show that the solutions they propose can be sustainable.

Marc Ivaidi, TSE

TSE researchers Emmanuelle Auriol and Claude Crampes, alongside co-author Antonio Estache, won the 2022 AEE Marcel Boltex prize for their book, “Regulating Public Services: Bridging the Gap between Theory and Practice”. The French AEE (Association des Economistes de l’Energie) brings together energy economists from a wide range of academic and public institutions, and across the private sector.

Agence France Développement (AFD), Association Finance Durable et Investissement Responsable, Autorité de Régulation des Transports (ART), Bill & Melinda Gates Foundation (for the FIT IN Initiative), GRDF, Orange, La Poste Groupe, Royal Mail, SNCF Réseau


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Since 2020, Martial Dupaigne has been advising the Toulouse rent watchdog Observatoire des Loyers de l’agglomération toulousaine, part of the observation network set up in 2013 by the French Ministry of Housing.

Until March 2022, Marie-Françoise Calmette was a member of the reference group for the evaluation of France’s contribution to Aid for Trade (AfT) over the period 2009–2019. The evaluation was set up by the Ministry of the Economy, Finance and Recovery, the Ministry for Europe and Foreign Affairs, and the French Development Agency.
Launched in 2018, TSE Sustainable Finance Center promotes innovative research on the challenges of finding sustainable finance solutions and assessing their impact on society. Research at the Center focuses on four main themes: responsible finance and long-term investments, financial technologies and digital markets, financial intermediaries and regulation, and financial behaviors and welfare and market (in) efficiencies.

Key numbers for 2022

11 articles in peer-reviewed journals

19 working papers

60 researchers

34 scientific events and a total of 788 attendees

13 related partnerships

"The TSE Sustainable Finance Center has continued to thrive over the past year. With the support of some of our partners, we hosted lively workshops and a conference on mobile money interoperability and risk markets. Our seminar series welcomed speakers from more than 24 leading universities around the world, demonstrating our eagerness to stimulate international exchanges between researchers. TSE researchers have made significant progress on research projects, for instance on how lifetime experiences shape investors’ decisions or the role of Big Tech firms as lenders. We have renewed our partnerships with the Association Finance Durable et Responsable (AFDIR) and Getlink and initiated, in collaboration with HEC, a new partnership with Autorité de contrôle prudentiel et de résolution (ACPR). TSE researchers have also been very involved alongside other public decision-makers and regulators including the Autorité des marchés financiers (AMF) and the European Systemic Risk Board (ESRB). This is just a small selection of the achievements over the past year."

Sophie Moinas
Director, TSE Sustainable Finance Center
**Responsible finance and long-term investments**

Our researchers analyze if we invest enough in long-term assets, evaluating immediate benefits compared to distant ones. We measure and evaluate the externalities imposed by firms on society to identify incentives for economic agents to incorporate these externalities in their decisions. This research is crucial to address contemporary concerns about climate change, nuclear risk, education and training, customer safety, and the welfare of employees and communities.

*Program leader:* Catherine Casamatta

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**Financial behaviors, welfare and market (in)efficiencies**

Researchers in this program strive to understand the capacity of financial markets and intermediaries to price assets, finance the economy and allocate risks which may be hindered by informational frictions and human cognitive biases. We identify the impacts of those frictions on investors welfare and the efficiency of the financial industry, studying whether their effects are worsened or mitigated by different market arrangements.

*Program leader:* Milo Bianchi

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**Financial intermediaries and regulation**

To deepen our understanding of financial intermediation and the prevention of crises, we investigate various topics related to monetary economics and aggregate liquidity, payment systems, prudential regulation, market finance and microstructure.

*Program leader:* Patrick Fève

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**Big Tech vs banks: Who wins?**

Tech giants are flexing their muscles as providers of credit. Matthieu Bouvard, Catherine Casamatta and Rui Xiong examine the incentives for this expansion, assessing its impact on merchants, buyers and traditional banks. They show that an e-commerce platform can target subsidized credit at merchants with lower collateral while increasing access fees, and effectively price-discriminating against merchants with lower credit constraints. The platform’s lending depends on its monitoring efficiency and its market power in its core business.

* “Lending and monitoring: Big Tech vs Banks“, TSE Working Paper n. 22-1386, November 2022

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**Are investors getting greener?**

How do life-time experiences affect investors’ demand for ESG stocks? Analyzing Shanghai Stock Exchange data, Milo Bianchi, Zhengkai Liu and Gang Wang find that some life experiences, notably growing up in periods with good market returns and being exposed to a natural disaster, have large and persistent effects on investors’ demand for responsible assets. They show that economic and non-economic experiences affect investors’ pro-social concerns, and they are key to understanding how ESG preferences evolve.

* “Are We Becoming Greener? Life-time Experiences and Responsible Investment“, TSE Working Paper n. 22-1382, April 2022

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**Does activism make waves in corporate asset markets?**

Shareholders are increasingly pushing for changes in corporate behavior. Ulrich Hege and Yifei Zhang show that most hedge-fund activism campaigns occur in clusters, by industry and time. These waves rock the boat for corporate assets: both target firms and their peers receive more merger bids, divest more and make fewer acquisitions. This causes a liquidity squeeze, reducing transaction prices and encouraging outsiders to buy more industry assets.


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**Size isn’t everything**

How does a firm’s ownership structure influence its behavior? Given its potential to impact firms’ ability to incorporate externalities in their decisions and to improve society’s allocation of risk, understanding this relationship is closely linked to core goals of the TSE Sustainable Finance Center. While existing research has focused on the largest blockholder, Silvia Rossetto builds on her theoretical work with an empirical analysis of the role of mid-sized blockholders.

19 finance seminars
Organized on a weekly basis by Matthieu Bouvard and Patrick Coen, the Finance seminar series gathers TSE researchers interested in financial economics and guest speakers from leading academic institutions. It features theoretical and empirical work related to corporate finance, asset pricing and financial intermediation.

11 macroeconomics seminars
The macroeconomics seminars are organized by four researchers with various areas of specialization: Tiziana Assenza, Fabrice Collard, Patrick Fève and Eugenia Gonzalez-Aguado.

"In 2022, the seminar featured speakers from top universities such as Columbia Business School, MIT Sloan and London School of Economics. Some of the key topics included the interaction between finance and environmental responsibility with Deeksha Gupta (CMU) or Magdalena Rola-Janicka (Tilburg), and the risk of financial intermediaries with Vincent Maurin (Stockholm School of Economics) or Nicola Limodio (Bocconi)."

Matthieu Bouvard
Co-chair of the seminar

SCOR-TSE workshop and conference
On January 28, the SCOR-TSE online Workshop on Long-Term Care and Aging showcased some of the latest economic research in this field. As the keynote speaker, Pierre Pestieau (University of Liège) delivered an overview of "The economics of long-term care". Other speakers included Jean-Marie Lozachmeur (TSE) on "Gender wage and longevity gaps and the design of retirement systems".

The TSE-SCOR Conference on Risk Markets and Value Creation took place in Toulouse in October. Among the many contributors, Jean-Charles Rochet (TSE) outlined his preliminary attempts to develop a new paradigm for understanding digital insurance, focusing on its implications for privacy.

Financial Inclusion Through Interoperability (FIT IN) workshops
TSE invited two practitioners from Banque de France to speak at a Workshop on Digital Money and Financial Regulation in Toulouse on May 9: Adeline Bachellerie (Head of the Digital Money and Innovation Department) and Bruno Monteil (Digital Money Expert). Their presentations were followed by an interesting discussion with several TSE researchers involved in the FIT IN Initiative.

The batch of laureates of the first call for proposals of the FIT IN Initiative selected in 2021 presented their latest research at a Workshop on Mobile Money Interoperability organized at TSE on December 15-16. They exchanged ideas with TSE researchers, post-docs and PhD students as well as a representative of the Bill & Melinda Gates Foundation which supports the FIT IN Initiative. Participants heard speakers from various affiliations including the Central Reserve Bank of Peru, the Center for Latin American Monetary Studies (CEMLA), and the University of Ibn Tofail (Morocco).

Initiative for Effective Corporate Climate Action
TSE hosted the launch event for this initiative on May 18, inviting Yann Leriche (CEO, Getlink) and Geraldine Périchon (CFO, Getlink) to share the floor with TSE researchers. After presentation by TSE’s Ulrich Hege outlining this new initiative, discussions revolved around the opportunities and pitfalls of corporate engagement for various stakeholder groups.
to the European Systemic Risk Board (ESRB) which oversees the EU’s financial system.

At a national level, Catherine Casamatta and Fany Declercq have been members of the scientific council of the French financial markets regulator (Autorité des Marchés Financiers - AMF) since 2020 and 2017 respectively. Sébastien Rouget has been a member of the Haut Comité Certificateur de Place within the same authority since 2021. Christian Gollier has been a member of the independent scientific committee which revises the composition of the CAC 40 ESG Index since its launch in 2021. Respecting to growing demand for sustainable investment tools, this index is designed to identify the 40 companies within the CAC Large 60 Index that demonstrate the best environmental, social and governance (ESG) practices.

On a regional level, Fany Declercq joined the board of Occitanie Place Financière (OPF) in June 2022. OPF brings together financial professionals and institutional players from across the region.

Our researchers also contributed to many events organized by key players in the finance and insurance sectors in France and abroad. One example is the 2022 Congrès des Actuaires “Enlightening the future in a world in transition” (June, Paris).

TSE director Christian Gollier chairs the scientific committee of the European Savings Institute (Observatoire de l’Epargne européenne – OEE). In December 2022, he was also appointed as a scientific advisor to the Banque de France to develop outstanding research on monetary economics and finance. In their fourth or fifth year of study when they received their grant, most have since successfully defended their thesis. Two joined prestigious American research institutions for a post-doc: Fernando Stipanic at the Haas School of Business (Berkeley), and Alexandre Galliard at the Jülich-Rabinowitz Center for Public Policy & Finance (Princeton). Filip Movivc joined Cornerstone Research in New York and Yifei Zhang was appointed assistant professor at the HSBC Business School (University of Beijing). Friederich Lucke became a researcher at the Joint Research Center of the European Commission.

Jean-Charles Rochet, who became a permanent member of TSE in 2022, has been on the advisory panel of the Bank for International Settlements (BIS) since 2018. The mission of BIS is to support central banks’ pursuit of monetary and financial stability through international cooperation, and to act as a bank for central banks.

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On a regional level, Fany Declercq joined the board of Occitanie Place Financière (OPF) in June 2022. OPF brings together financial professionals and institutional players from across the region.

Our researchers also contributed to many events organized by key players in the finance and insurance sectors in France and abroad. One example is the 2022 Congrès des Actuaires “Enlightening the future in a world in transition” (June, Paris).

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Our researchers also contributed to many events organized by key players in the finance and insurance sectors in France and abroad. One example is the 2022 Congrès des Actuaires “Enlightening the future in a world in transition” (June, Paris).
Building on a long tradition of producing leading academic research in competition policy and regulation, TSE Competition Policy & Regulation Center was created in 2021. It coordinates the academic and outreach activities of TSE in these areas and aims to promote policy-relevant research and foster interactions between academics and regulators. Research areas include competition policy, regulation for the digital era, regulation of infrastructure and network industries, and financial intermediaries and regulation.

In 2022 we were able to share our expertise and interact with regulators in many ways. TSE researchers were involved in a research partnership on the future of motorway concessions with the French transport regulator (ART), and we laid the groundwork for a new research partnership with the banking and insurance regulator (ACPR) and HEC Paris business school. We also partnered with the European Commission and the Belgian Competition Authority to organize cutting-edge discussions between academics and decision-makers from the public and private sector. In addition, we established a new academic partnership with the Tobin Center for Economic Policy at Yale University to produce and promote policy-relevant research on the regulation of the digital economy. We also fostered non-institutional, but equally crucial interactions with regulators to improve the relevance of our research and magnify its impact for society.

Yassine Lefouili
Director, TSE Competition Policy & Regulation Center
The digital revolution is a great source of economic progress but also poses new challenges to antitrust enforcers and regulators. On the forefront of topical research on this issue, TSE’s productivity can be measured not only by the many publications of its members, but also by the number of its scientific events addressing this topic, as well as the 2022 award of a European Research Council (ERC) senior grant on competition and regulation in the digital economy.

Patrick Rey
Scientific Director, TSE Competition Policy & Regulation Center

**Regulation of infrastructure and network industries**

We strive to advance research about the design of regulations that address the market failures preventing effective competition in infrastructure and network industries, such as telecommunications, transportation, and energy, which have characteristics that call for ex ante regulation.

**Financial intermediaries and regulation**

Research in this area is focused on various topics related to monetary economics and aggregate liquidity, payment systems, prudential regulation, market finance and microstructure. Our aim is to deepen understanding of financial intermediation and the prevention of crises.

**Creating a level playing field for public procurement**

Many countries are liberalizing the markets for local public services such as transport, waste management, and school meals—with the aim of fostering competition for the market, in the form of tenders for specific services, if not in the market. However, these liberalization efforts are often undermined by the incumbency benefits that confer a comparative advantage to the operators initially providing the tendered services. Examining the impact of market design and, in particular, the timing of tenders, Elisabetta Iossa, Patrick Rey and Michael Waterson show that synchronous contracts should be favored when incumbency advantages are so large that monopolization is inevitable, whereas staggered contracts are preferable when persistent competition is viable.

**Could the Great Recession have been avoided?**

Did structural changes in the banking industry contribute to the slow recovery of the US economy after the 2008 financial crisis? Analyzing key asymmetries with traditional banks in terms of regulation, frictions and shocks, Patrick Fève, Alban Moura and Olivier Pierrard demonstrate that the post-crisis collapse of shadow banking weighed heavily on economic activity by limiting credit supply and raising lending rates.
Policy seminars

The Competition Policy & Regulation Center hosted three seminars in 2022. The choice of guest speakers was eclectic: a professor of economics (and former head of the Norwegian competition authority), a partner from a law firm, and the Director General of Competition at the European Commission. Interacting with academics of other affiliations, practitioners and decision-makers is enriching in many ways for the students and faculty members who attend the seminars and work on competition policy issues.

Indicative list of affiliations for our visitors in 2022:

- **Sectoral regulatory bodies:**
  - Autorité de régulation des communications électroniques, des postes et de la distribution de la presse (ARCEP)
  - Commission nationale informatique et libertés (CNIL)

- **National competition authorities:**
  - French Competition Authority,
  - Belgian Competition Authority,
  - Finnish Competition Authority,
  - UK Competition & Markets Authority

- **European regulatory bodies:**
  - Directorate-General for Competition of the European Commission

Regulating the Digital Economy workshop

(Travel, May 20–21)

This event was organized by the Competition Policy & Regulation Center and the Digital Economy Project at Yale's Tobin Center. Researchers from both institutions have been working together on several papers which will be published in the Yale Journal on Regulation. Filomena Chirico, who heads the digital markets unit at the European Commission (DG Connect) and was previously a member of Thierry Breton's cabinet, shared her insights about the Digital Markets Act.

BCA-TSE workshop on Antitrust Frontiers

(Travel, October 27)

Organized by the Competition Policy and Regulation Center and the Belgian Competition Authority, the objective of this workshop was to foster interactions between TSE academics and competition enforcers. TSE faculty and chief economists from the Belgian, Dutch, Portuguese and French national competition authorities discussed antitrust issues, such as the role of competition policy in times of inflation or the way competition law should be enforced in cases that present sustainability concerns.

JRC-TSE workshop on Liability in the Digital Economy

(Seville, July 8)

Organized by the Competition Policy & Regulation Center and the Joint Research Centre (JRC, the European Commission’s science and knowledge service), this workshop brought together academics, policymakers, and practitioners to discuss the latest developments regarding liability in the digital economy. Simone Gobello (Public Policy Manager, EU Affairs, Meta) participated in a policy roundtable with Alexandra Matthews (Munich Re), Irene Roche-Laguna (DG Connect, European Commission), and Dirk Staudenmayer (DG for Justice and Consumers, European Commission).

Visitors

The workshops and seminars organized by the Center have fostered numerous interactions with representatives of French and foreign regulatory authorities. Other enriching interactions have taken place in the context of visits to TSE, and sometimes at events organized by other Centers such as TSE Digital Center or TSE Infrastructure & Network Center.

Indicative list of affiliations for our visitors in 2022:

- **Sectoral regulatory bodies:**
  - Autorité de contrôle prudentiel et de résolution (ACPR)
  - Autorité de régulation des transports (ART)

- **National competition authorities:**
  - French Competition Authority,
  - Belgian Competition Authority,
  - Finnish Competition Authority,
  - UK Competition & Markets Authority

- **European regulatory bodies:**
  - Directorate-General for Competition of the European Commission

Partners for specific research projects

Autorité de contrôle prudentiel et de résolution (ACPR), Autorité de régulation des transports (ART)
Developing connections with European regulatory bodies

As part of their research projects, TSE researchers have developed links with the European Commission’s Joint Research Centre (JRC) and contacts in several policy departments (Directorates-General) within the European Commission such as DG Competition, DG Connect, and DG Energy.

TSE was also honored to have Margrethe Vestager, EU Commissioner for competition and the digital market, and Pascal Canfin, Chair of the European Parliament’s Committee on the Environment, Public Health and Food Safety, share their thoughts and discuss topical policy-related issues with researchers at the Common Good Summit.

Sharing expertise with public institutions

TSE faculty have also contributed to improving economic reasoning in regulatory debates and practices by acting as experts for agencies and courts, serving in advisory bodies, and training current and future members of public institutions.

One good example is Patrick Rey. For the European Commission, he is a founding member of the Economic Advisory Group on Competition Policy (EAGCP). Last year, he participated in the EAGCP subgroup working on new economic tools for the digital economy, the revision of the block exemption, and guidelines on vertical restraints. He has also been closely involved with the Spanish National Markets and Competition Commission. In June, the Hellenic Competition Commission invited him to speak at its annual conference which focused on asymmetric adjustment of fuel prices in relation to costs. In November, Patrick Rey met the teams of the Chilean competition authority (Fiscalía Nacional Económica) in Santiago.

In addition to the strong involvement of our scientific director, as detailed elsewhere in this report, TSE researchers have also been working closely with scientific committees and evaluation groups linked to regulators and other public institutions such as the Autorité des Marchés Financiers (AMF), Agence nationale de sécurité sanitaire de l’alimentation, de l’environnement et du travail (ANSES), and the European Commission.

Proud of our alumni community

In 2022 we were delighted to see alumni take on responsibilities within regulatory authorities. For example, Thibault Vergé, who received his PhD from TSE in 2001, was named Vice-President of the French Competition Authority in December. He joined a long list of TSE alumni already involved with such authorities, including Benoît Loutrel, member of ARCOM since 2021.

The role of science in informing policy and supporting decision-making is crucial. In that respect, TSE’s contribution in understanding the digital economy is beyond question.”

Thierry Breton
European Commissioner for the Internal Market
Keeping you informed

TSE Reflect newsletter

The first issue of the TSE Reflect newsletter for practitioners was launched in February 2022. This monthly missive is designed to share research advances as well as news regarding our partnerships and upcoming events, replacing the old format of TSE Center newsletters with a 100% digital format. It highlights the impact of our partners' support for research at TSE and the work of the TSE Centers.

TSE Reflect focuses on a different theme each month. Since its creation, we have delivered analysis from our academic community on important current topics about competition, digital economics, energy and climate, health, infrastructure and networks, and sustainable finance.

Read and sign up at www.tse-fr.eu/tse-reflect

TSE Mag

The spring edition of TSE’s biannual magazine showcased some of our latest research under the theme “Health economics: Innovation and cost”. The fall edition offered insight on “How to fast-track green transport”.

Read and sign up at www.tse-fr.eu/tse-mag

In the media

Below is just a selection of the columns our researchers wrote for the press in 2022:

• Comment rendre les médicaments plus accessibles ? Yassine Lefouili, La Tribune, February 19
• Comment les mathématiques luttent contre le cancer Sébastien Gadat, La Tribune, March 1
• Climat : pas de réindustrialisation sans taxe carbone aux frontières ! Christian Gollier, L’Express, March 6
• Quels sont les effets redistributifs de la tarification de l’électricité en temps réel ? Stefan Ambec & Claude Crampes, La Tribune, May 25
• Stratégie bas carbone : être à la fois lièvre et tortue Frédéric Cherbonnier, Les Échos, June 9
• Impérative, la réforme des retraites ne suffira pourtant pas – Jean Tirole, Challenges, October 13
Major advances in economics have been made thanks to our researchers in 2022. But hundreds of other people, including donors and sponsors, have also helped to make such achievements possible. We are eager to share our successes with you all. Thank you!

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**Our resources:**
Research partners & people

2022 was a year of consolidation for TSE research partnerships, as the world emerged from the Covid crisis. The section below provides a list of all our partners, with a brief description of the research they support. The research topics are varied; as are the types of partners, including a Toulouse start-up, global platforms, and public institutions. But they share a desire to support TSE projects that expand and disseminate knowledge, making a concrete contribution to the common good.

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**Agence Française de Développement (AFD)**
Exploring the social and environmental aspects of sustainable development with research on social protection, social linkages, and transition risks, particularly climate and financial risks.
*Coordinator:* Emmanuelle Auriol

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**Autorité de contrôle prudentiel et de résolution (ACPR)**
Encouraging research focused on state-of-the-art evaluation and understanding of systemic risks, prudential regulation of the financial and banking system, and related challenges and opportunities.
*Coordinator:* Sophie Moinas (jointly with Christophe Péignon, HEC)

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“**Our partnership provides new opportunities for the ACPR team to interact with academics from TSE and HEC Paris. We are pleased to participate in this constructive dialogue and support the ambition of our academic partners to develop innovative research in the field of regulation and systemic risks.”**

Laurent Clerc
Director for Research and Risk Analysis, ACPR

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ACPR, a new partner in 2022
TSE joined forces with HEC Paris business school to launch a new research initiative sponsored by ACPR. Launched for three years, this initiative explores a wide range of topics such as regulation and competition in banking and insurance, climate risk and green finance, biases and discrimination in artificial intelligence, modeling and management of risks (cyber, epidemiological...). It aims to promote research on emerging issues and to disseminate cutting-edge research findings towards firms, policymakers, and the wider public. Activities will include the production of high-quality research publications, academic conferences, as well as research workshops and seminars. The initiative gathers a team of around 30 international researchers with different research interests in finance, economics, econometrics, statistics, and accounting.
Airbus
Examining a wide range of research topics with a focus on the digital economy.
Coordinator: Yassine Lefouili

Amazon
Exploring a wide range of research topics related to the development of the digital economy.
Coordinator: Karine Van der Straeten

Association Finance Durable et Investissement Responsable (AFDIR)
(in support of the Initiative FDIR, in collaboration with Ecole Polytechnique)
Exploring research topics in the areas of responsible investment and sustainable finance, with a focus on long-term ESG performance and risk evaluation, corporate governance, and shareholder engagement.
Scientific directors (on the TSE side): Catherine Casamatta and Sébastien Gadat

Banque Centrale du Luxembourg (BCL)
Exploring the role of central banks, the conduct of monetary policy, micro and macro-prudential supervision, as well as risks and opportunities in the field of payment systems and services.
Coordinator: Patrick Féve

Banque de France
Developing research in the fields of microstructure, financial intermediation, risk, and macroeconomic analysis.
Coordinators: Fany Declerck and Fabrice Collard

BBVA
Investigating a range of research topics at the crossroads between finance and digital economics.
Coordinator: Alexander Guembel

Bill & Melinda Gates Foundation
(in support of the FIT IN Initiative)
Developing research to understand the implications of alternative competition and regulatory policies and inform efforts to facilitate access to digital payment systems in low- and middle-income countries.
Program director: Milo Bianchi
Scientific director: Emmanuelle Auriol

bioMédecus
Addressing emerging issues in health economics with a focus on market failures for innovation in antibiotics and healthcare products, and the economic evaluation of innovation in diagnoses.
Coordinator: Pierre Dubois

Causality Link
Exploring new applied and theoretical challenges in machine learning, building on TSE expertise in economics, mathematics and finance and the power of predictive analytics.
Coordinator: Sébastien Gadat

Danone
Advancing knowledge on the societal impact of companies by exploring a range of research topics at the crossroads between sustainable finance and food economics.
Coordinators: Sébastien Pouget and Sophie Moinas

Electricité de France (EDF)
Studying a wide range of topics related to energy production, and the pricing and distribution of electricity.
Coordinator: Stefano Ambec

ESSO SAF
Exploring a range of research topics related to carbon pricing and the risk of carbon leakage.
Coordinator: Stefano Ambec

ENGIE
Developing scientific knowledge to address issues in energy markets (electricity and gas in particular), using the tools of economic theory.
Coordinators: Christian Gollier and Gilles Lafforgue

Addressing the energy transition with ENGIE
ENGIE and TSE have been partners for almost 15 years. In 2022, they began a new three-year partnership. Within the Strategy Department at ENGIE, the Economics, Markets, Scenarios division has been a privileged interlocutor for TSE researchers. Upcoming work will investigate new forms of organization in electricity and gas markets: these sectors are likely to converge in response to the upheaval caused by the rapid growth of renewable energies in the energy mix. Researchers will also address the anticipated consequences of emission targets on optimal decarbonization scenarios.

ENGIE wishes to call upon the economic expertise and modelling know-how which TSE can provide. We seek the objectivity of academic work carried out over the long term.”

Pierre-Laurent Lucille
Chief economist, Engie

Groupement pour l’Elaboration et la Realisation de Statistiques (GERS)
Advancing research on public-health issues of concern to the pharmaceutical industry.
Coordinator: Ulrich Hege

GERS, providing data and funding research
GERS SAS and GIE GERS, which collect and analyze sales statistics from retail and hospital markets for pharmaceutical firms and regulators, were among the early supporters of the TSE Health Center. Initiated in 2019 and renewed in 2022, this partnership provides TSE with financial support for research, as well as access to drug and health-product sales data for scientific purposes. This enables in-depth analyses to be carried out on research topics of interest to the pharmaceutical industry, including the shortage of medicines, parallel trade in medicines, and the economics of antibiotics.

We support researchers in health economics, with a view to better understanding the economic and political issues in our sector, and ultimately to improving quality and access to care.”

Patrick Oscar
CEO, GIE GERS & GERS SAS

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Patrick Oscar
CEO, GIE GERS & GERS SAS
Microsoft
Supporting new research on cloud computing and mergers.
Coordinator: Jacques Crémer

Reinventing our partnership with Microsoft
Microsoft has supported the research of TSE’s economists since 1999. In addition to supporting research projects carried out by researchers, in 2005 Microsoft became the sponsor of the Toulouse Network for Information Technology (TNIT). Soon after TNIT came to an end, Microsoft renewed its support by sponsoring new research on two topics: cloud computing and mergers. Whereas firms, governments and non-profit organizations used to run most of their computing in-house, first through computers and then servers, the world’s computations and data storage are now increasingly carried out “in the cloud.” With the support of Microsoft, TSE aims to advance the understanding of the economic consequences of this very disruptive technology. TSE researchers will also work on a second research project to help determine whether mergers should be classified as horizontal or vertical.

The development of the cloud raises important analytical and policy questions, yet very little research has been done in this field. The new research developed by TSE could provide new insights for all those interested in the economics of the cloud.”

Rima Alaily
Corporate VP & Deputy General Counsel – Competition Law Group, Microsoft

Gaz Réseau Distribution France (GRDF)
Providing scientific insights on several issues, including the investment choices and incentives for firms like GRDF, the optimal cost-sharing method, the use of smart gas meters, and the consumption behavior of gas users in the context of the energy transition.
Coordinator: Frédéric Cherbonnier

Huawei
Encouraging research at the frontier of machine learning, optimization and statistics.
Coordinators: Jérôme Bolte and Sébastien Gadat

La Poste Groupe
Addressing new economic challenges linked to major transformations brought by the arrival of new communication technologies.
Coordinator: Helmuth Cremer

LUohan Academy – Ant Group
Exploring research on multiple issues including competition and privacy in platform markets, economic aspects of blockchain technologies, and the fintech revolution.
Coordinator: Doh-Shin Jeon

Meta
Exploring topics related to the development of the digital economy.
Coordinator: Andrew Rhodes

Netspar
Encouragement for a research project on sustainable investments, conducted jointly with Rob Hauer, professor of Finance and co-founder of the European Centre for Sustainable Finance (ECCE) at Maastricht University.
Member for TSE: Sébastien Pouget

Orange
Developing scientific knowledge on the economics of data, the environmental impact of telecoms, and cooperation between operators.
Coordinator: Bruno Jullien

Royal Mail
Proposing research-based solutions for improving demand-forecasting techniques for postal products, estimating the determinants of production boundaries using microdata at delivery points, and estimating price elasticities of demand for postal products such as those used by advertisers or publishers.
Coordinator: Thierry Magnac

SCOR Corporate Foundation for Science
Exploring applied and theoretical research to better understand how risk transforms and influences economic decisions.
Coordinator: Stéphane Villeneuve

SNCF Réseau
Identifying the optimal way to adapt the transport offer to different types of demand, as well as the effects of the ecological transition.
Coordinator: Frédéric Cherbonnier

TotalEnergies
Exploring a range of research topics related to the energy transition.
Coordinator: Stefan Ambec

Urosphere
Providing a better understanding of economic issues related to the global economic market for in vitro tests with avatars in cancerology, or for tests involving personalized medicine.
Coordinator: Philippe De Donder
How to support us?

Partners can support research within a specific scientific project – a research initiative or a chair – and/or contribute to the long-running operations of one or several TSE Centers. Many research programs are undertaken across several different Centers – such as Digital and Sustainable Finance – and adopt a multidisciplinary approach.

TSE donors and project sponsors provide funding to encourage the establishment of world-class teams on emerging research issues, as well as funding for visiting programs and research grants. In addition to financial support, TSE researchers benefit greatly from access to real-world databases.

Research partnerships at TSE are undertaken within the TSE-Partnerships Foundation (TSE-P), which operates under the aegis of the TSE - Jean-Jacques Laffont Foundation.

Corporate donations to the TSE-Partnerships Foundation can be made tax-efficiently:
- In France through the TSE - JJ Laffont Foundation,
- In the US through American Friends of TSE (501c3 charitable corporation).

Partnerships with TSE-P can also take the form of a specific sponsored research agreement under the French R&D scheme called “Crédit d’Impôt Recherche” (or Research Credit Tax).

Developing high-level academic alliances to boost scientific excellence

Research partnerships have given TSE the opportunity to formalize research collaborations with research teams from Ecole Polytechnique (as part of the FDIR Initiative) and HEC Paris (as part of the tripartite partnership with ACPR). These academic partnerships pool diverse expertise to tackle important questions of interest to partners and society.

TSE also developed closer ties with Fudan University in 2022. This led to the launch, on November 27, of the Fudan University-TSE Research Institute of Innovation and Digital Economy (or FT-RIDE), inspired by the success of TSE Digital Center.

“Research partners at TSE include corporations, public institutions and foundations. We are fortunate to be able to offer a wide range of partnership solutions, and we are committed to finding the best way to combine the needs of our researchers and the expectations of our partners.”

Éve Séjalon
Head of Research Partnerships and Centers, TSE

“At TSE, we pride ourselves on being able to bring together brilliant minds to meet the intellectual challenges before us.”

Christian Gollier
Director, TSE

TSE also relies on its network of affiliated researchers. Based in France or abroad, these affiliates are often co-authors of publications with TSE researchers and speakers at scientific or outreach events organized by TSE. On an individual basis, several of them have taken part in our activities involving partners and other decision-makers. Many thanks to them too!

Launching ceremony of FT-RIDE in Shanghai on November 27
Research partners in the TSE ecosystem

Connecting research and education

Engage with our students

TSE is training tomorrow’s top economists by offering multidisciplinary undergraduate, master’s, and PhD programs. Its 2,500 students benefit from the academic excellence of TSE faculty but also from the input and advice of practitioners and international experts. Research partners are most welcome to connect with the TSE Career Service to:

- Give a Business or an Alumni Talk on economic issues and share career-path experience with our students.
- Participate in professional development sessions and offer precious advice on how to navigate the job market.
- Take part in TSE courses and present solid case studies to share the fundamentals of economics and mathematics and their real-world applications.
- Recruit top talent and connect with future collaborators by participating in our career fair: “Business Networking Day”.
- Post job and internship offers on the TSE Alumni website.
- Cooperate with the associations affiliated to TSE such as Junior Consulting, and Women in Economics.
- Support the school by giving part of the “Taxe d’apprentissage” to TSE.

Contact: careers@tse-fr.eu

On December 8 at TSE, Governor of Banque de France François Villeroy de Galhau gave a talk on the consequences of the energy-price and terms-of-trade shock in the euro area and in France. It was part of a series of “Business Talks” given by practitioners that TSE organized in 2022. The main auditorium of TSE was filled with future TSE graduates aspiring to become an economist, analyst, data scientist, statistical research manager or consultant.

Almost 50 companies and institutions attended the TSE Business Networking Day on November 25. Organized every year, it is a unique opportunity for students to be in contact with a wide range of French and international firms and public institutions. Our research partners Airbus, Banque de France, and La Poste Group were among those present to offer career opportunities.

Increasing numbers of companies and institutions are also involved in the different programs for TSE students. An example is the Master in Data Science for Social Sciences and Statistics and Econometrics which organizes statistical consulting workshops throughout the academic year and welcomes many companies including Airbus, Airbus Helicopters, and BVA.

Contact: careers@tse-fr.eu

Programs geared to meet the needs of professionals

TSE Executive Education offers carefully designed courses, based on the latest economic research and taught by internationally renowned faculty with the aim of providing in-depth understanding and insights on new and increasingly complex economic challenges.

- Train your teams
- Participate in policy events

Contact: exed@tse-fr.eu

Executive Education course: Corporate Climate Action

(online, June 30)

Over 60 participants gathered to understand the key reasons why companies are implementing climate-related policies. TSE faculty provided an overview of how these policies can be implemented and what the implications are for economic and financial performance.

A case study was an integral part of this course, and we thank our partner Getlink for their involvement with this, and for their participation in the panel discussion that followed the course.

Executive Education Seminar

(Brussels, October 28)

TSE Executive Education’s annual seminar is one of many opportunities for our partners to learn about some of the hottest topics in antitrust and merger control in the EU. The seminar was attended by several of our partners who were able to hear from top competition officials, academics and practitioners on topics such as vertical mergers, rebates, and gatekeeper regulation.

See the list of the members of the TSE Club des partenaires

Going further: Helping us shape the future TSE
Economics for the Common Good