

THE TOULOUSE SCHOOL OF ECONOMICS MAGAZINE

# TSE MAG

Living economics

## IDEAS IN ACTION

A focus on public policy

#18  
WINTER  
2018



Victor Gay  
on War and  
Gender

⋮  
⋮  
⋮  
⋮  
⋮

Olivier De Groote  
on Solar Panel  
Adoption

⋮  
⋮  
⋮  
⋮  
⋮

Nick Rawlins and  
Michel Pébereau on  
the TSE Campaign

⋮  
⋮  
⋮  
⋮  
⋮

Thomas Coutts and  
Milena Mileva from Baillie  
Gifford on investment



Dear friends,

The laureates of this year's Nobel Prize in economics, William Nordhaus and Paul Romer, are worthy recipients of the prize. As pioneers of practical tools to help policymakers mitigate climate change while creating long-term sustainable growth, their work is essential in ensuring that policy decisions and public investments are based on their impact on collective prosperity, both for us and future generations.

In this issue we have chosen to focus on the role of academics in public policy. To our mind, economists have a collective responsibility to help society make more informed decisions. Economists and society must not shy away from the great challenges of the 21st century, including climate change. In the words of Paul Romer, responding to news of his prize, "People think protecting the environment will be so costly and so hard that they want to ignore the problem and pretend it doesn't exist. Humans are capable of amazing accomplishments if we set our minds to it."

Ultimately, our collective decisions about the future should be made by comparing costs and benefits, using a coherent system of values. Lack of evaluation reinforces the impression that policies are based on ideology rather than the quest for the common good, which fuels populism. However, if evaluation procedures are transparently defined and controlled by representative bodies, they strengthen democracy.

The opportunities for improving the transparency and evaluation of public decisions are greater than ever, explain TSE faculty Sylvain Chabé-Ferret and Nicolas Treich in this magazine, thanks largely to advances in experimental methods. As an example, we feature a study by PhD student Nina Hestermann, coauthored by Nicolas Pistoletti, which tests a French reform aimed at helping fresher students find the right university degree.

This issue also features a focus on our ongoing fundraising campaign headed by Michel Pébureau, Chairman of the Jean-Jacques Laffont - TSE Foundation (JJL-TSE Foundation). We take a look through the decision-making lens with investment management firm Baillie Gifford, present the latest results from our alumni survey on jobs, and discuss new research paths with two talented new arrivals at TSE: Olivier De Groote from KU Leuven and Victor Gay from the University of Chicago. A lot of exciting reading that we hope, as always, you will enjoy!

Best regards,

**Christian Gollier**, TSE Director  
**Jean Tirole**, TSE Honorary Chairman



Christian Gollier

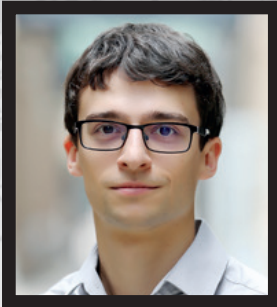


Jean Tirole

**Economists have a collective responsibility to help society make more informed decisions**

## News & events

- 4 Appointments & prizes
- 5 Save the date
- 6 Newcomers



Olivier De Groote



Victor Gay

## Thinkers

- 7 War and gender roles  
Victor Gay
- 8 Making the grade  
Olivier De Groote

## Actors

- 20 TSE's campaign: 'Toulouse Talent – Global Impact'  
Michel Pébureau and Nick Rawlins
- 24 A common interest  
Thomas Coutts and Milena Mileva

## Campus

- 28 Recruiters trust TSE graduates
- 30 Alumni from our master's degrees

### IDEAS IN ACTION

A focus on public policy

- 12 The power of ideas:  
Jean Tirole on the role of academics in public affairs
- 14 How to evaluate policy:  
Sylvain Chabé-Ferret and Nicolas Treich
- 16 What's the best solution?  
TSE Faculty on privacy, advertising, fat taxes, recessions, and monetary policy
- 18 Are students on the right track:  
Nina Hestermann and Nicolas Pistoletti

Trimestrial magazine of Toulouse School of Economics  
21, allée de Brienne - 31015 Toulouse Cedex 6 - FRANCE - Tél. : +33 (0)5 67 73 27 68

Publication Director: Christian Gollier - Managing Editor: Joël Echevarria  
Editor in chief: Jennifer Stephenson - Production Manager: Jean-Baptiste Grossetti  
With the help of: Claire Navarro - James Nash  
Graphic design and layout: Yapak  
Pictures: ©Studio Tchiz, ©Fotolia, ©Istock, ©Wikimedia, ©Unsplash Katie Moum.

1000 magazines printed on offset paper from renewable forests. ISSN: 2554-3253



# Appointments & prizes



## TSE ranked in global top 20

The Academic Ranking of World Universities, commonly referred to as the "Shanghai University Ranking" has placed TSE as the top university in economics in continental Europe and 17th worldwide.



## Stefan Ambec wins AMP award

Paul Lanoie (HEC Montréal) and Stefan Ambec (TSE-INRA) received the Decade Award from the *Academy of Management Perspectives* (AMP) journal for their article 'Does It Pay to Be Green?', published in 2008 and cited more than 1,220 times in scientific journals.



## Mohamed Saleh wins EHA prize

The TSE-IASST researcher's article 'On the Road to Heaven: Taxation, Conversions, and the Coptic-Muslim Socioeconomic Gap in Medieval Egypt' won the Economic History Association's Cole Prize for the best article published in the *Journal of Economic History*.



## Michel Pébureau Appointed Chairman of the JIL-TSE Foundation

The former BNP Paribas Chairman and long-term supporter of TSE takes up this important mandate with a special focus on planning the future organization of the Foundation.

## Jean Tirole joins UN digital panel

Melinda Gates and Jack Ma will discuss digital cooperation with the TSE chairman, alongside other a select group of international experts from government, private industry, civil society, academia and the tech community.



## Vietnam prize for Thi-Huong Trinh

The TSE PhD student received the best paper prize for 'Macronutrient balances and body mass index' at the 2018 Vietnam Economist Annual Meeting in Hanoi.

## Nour Meddahi joins the Econometric Society

Nour Meddahi (TSE - UTC) has been elected Fellow of the Econometric Society, one of the most prestigious learned society in the field of economics.

## Marianne Andries wins 4nations cup

The 4nations cup gathers the most promising young scholars in financial economics to compete through 40-minute seminars. After a day of fierce battle in Berlin, Marianne Andries (TSE-UTC) and Guillaume Vuillemy (HEC) won the 2018 cup for France. The losing nations were Germany, Sweden and the UK.

## Marc Ivaldi elected new president of the ITEA

The TSE-EHESS professor will be the fourth president of the International Transportation Economics Association.

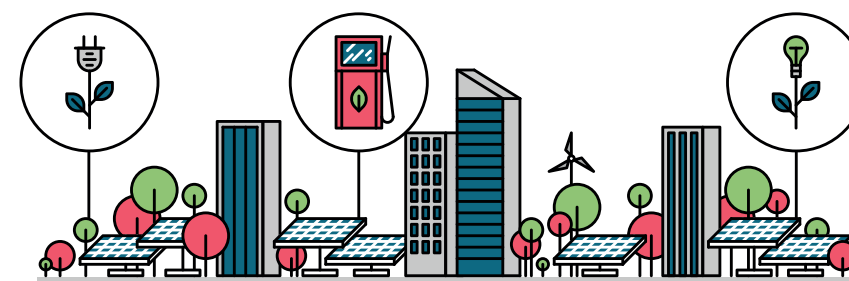


## Emmanuelle Auriol (TSE-UTC) appointed to CAE

The Conseil d'Analyse Économique (CAE) informs the French Prime Minister through public economic analysis reports.

## Christian Gollier TSE cofounder received the 'Publication of Enduring Quality' prize

from the Association of Environmental and Resource Economists. The prize is awarded annually for works that are of a seminal nature and with enduring value in environmental and resource economics.



## Save the date

JANUARY  
10-11, 2019

The 12th Digital  
Economics Conference

APRIL  
23-26, 2019

14th Conference of  
the European Human  
Behaviour and Evolution  
Association

MAY 17, 2019

TSE Digital Forum  
Paris



# Newcomers



**Fabrice Collard**

UNIVERSITY OF BERN

Fabrice focuses on macroeconomics, business cycle, economic growth, applied times series and computational economics. He joins the macroeconomics research group which he has previously worked with as a CNRS researcher from 2000 to 2006.



**Olivier De Groote**

KU LEUVEN

Olivier works on applied microeconomics, within the fields of labor economics and industrial organization. He joins the econometrics and empirical economics research group, where he will pursue his work on solar panel adoption and educational choices.



**Victor Gay**

UNIVERSITY OF CHICAGO

Victor specializes in economic history, economics of culture and political economy, he joins the development economics research group where he will continue his work on the economic impact of culture.



**Niccolò Lomys**

UNIVERSITY OF MANNHEIM

Niccolò completed his PhD at the University of Mannheim and joins TSE as a Post-Doctoral research fellow. He is specialized in microeconomics and works on dynamic games, with a focus on learning in strategic environments.



**Laurent Miclo**

UNIVERSITÉ TOULOUSE PAUL SABATIER

Laurent is working on the theory and applications of Markov processes, he joins the mathematics of decision-making and statistics research group at TSE.



**Benjamin Ouvrard**

INRA, NANCY

Following his PhD from INRA, in Nancy, Benjamin joins TSE as a post-doctoral research fellow. He mostly works on nudges, public economics and environmental economics.



**Blake Shaffer**

UNIVERSITY OF CALGARY

Blake is an energy and environmental economist interested in how people and firms respond to prices, policies and natural phenomena. Following an energy trading experience in Vancouver, he completed his PhD at the University of Calgary and joins TSE as a post-doctoral research fellow.

## Visiting us this year

**Tiziana Assenza**

CATHOLIC UNIVERSITY OF MILAN  
MACROECONOMICS

**Matthew Gentry**

LONDON SCHOOL OF ECONOMICS  
IO & ECONOMETRICS

**Ian Jewitt**

OXFORD UNIVERSITY  
MICROECONOMIC THEORY

**Clare Leaver**

OXFORD UNIVERSITY  
INDUSTRIAL ORGANIZATION

## VICTOR GAY ON THE PERSISTENCE OF CULTURE

# War and gender roles

**W**hat is culture? How does it emerge and change over time? These complex questions are at the root of the work led by Victor Gay, who recently joined TSE and IAST from the University of Chicago.

### What led you to TSE?

I completed my PhD at the University of Chicago after a master's degree at ESSEC Business School and the University of Cergy. I'm glad to arrive at TSE as there is a great faculty here. I am particularly excited to collaborate with Mohamed Saleh, who is a fellow economic historian.

**A woman whose grandmother or great-grandmother worked because of the war is more likely to work today**

### What can you tell us about culture?

Measuring culture is very complicated, especially when we consider how culture emerges and changes over time. One of my research projects, together with Estefania Santacreu-Vasut (ESSEC) and Daniel Hicks (Oklahoma), focuses on whether language, and specifically, the

pervasiveness of gender distinctions in grammar, helps to explain variations in women's economic behavior across cultural origins. Our intuition is that language structures reflect deep cultural differences. Our results highlight that women speaking more gendered language are less likely to work. In other words, language might be a marker of culture. Our current research explores how and why these structures emerged in the first place, and how they might reflect social structures of pre-modern societies.

### You also worked on the effects of the First World War?

The Great War was an extreme period for Europe and especially for France, during which more than 1.3 million French soldiers died. To capture the intensity of the war at the local level, I collected individual military records of all French soldiers who died. In 'The Missing Men', I show that areas in which more men died during the war experienced an inflow of women in the labor force after the war. Many of these women could not find a suitable husband and thus had to work to support their families. Similarly, war widows had to start working because subsidies were very low, at least until the early 1930s.

### How is this linked with culture?

This historical episode provides the opportunity to improve our understanding of the process of cultural change. In 'The Legacy of the Missing Men', I argue that women induced to enter the labor force after the war altered the preferences and beliefs about female labor of their



**Victor Gay,**  
TSE-IAST Assistant Professor  
Development Economics

daughters, sons, and entourage, and that these changes translated into the working behavior of women in subsequent generations. Consistent with this idea, I find that the impact of the First World War is still present today. For instance, a woman whose grandmother or great-grandmother worked because of the war is more likely to work today and to hold more progressive views about gender roles. We also witness a similar impact on attitudes, although lower, for men whose grandmother or great-grandmother became active following the war.

### What are your future projects?

I am currently interested in finding innovative ways of measuring people's beliefs across history. For instance, I am collecting information on the legislative behavior of representatives in the French National Assembly throughout the 20th century, with the goal of capturing their beliefs about gender roles. I am also starting a research project to explore the role of early nation-states and institutions for long-run economic growth.





# Making the grade

**O**livier De Groote joins the TSE econometrics and empirical economics group from the KU Leuven, in Belgium, to pursue his work on solar panel regulation, school choices and childcare organization. He tells us about his work and his first impressions of TSE.

Arriving at TSE in September, Olivier says he is very happy to be here. "During the interviews when my friends asked me what my dream position would be, I answered TSE: it's a great place to work and a very strong economics department. Staying in Europe was also a nice plus." His area of expertise includes applied microeconomics and empirical industrial organization, and he has carried out research on solar panel adoption and educational choices.

## Solar panels

Using a dataset spanning from 2006 to 2012, Olivier has been able to look at the way households value the benefits of the adoption of solar panels. "In joint work with Frank Verboven, I analyze whether the policy of subsidies in Flanders (Belgium) has been good and whether there was a less expensive way to achieve the same results. We show that subsidizing investment benefits, rather than upfront

investment costs, has proven to be quite expensive, mostly because consumers seem to undervalue the benefits of installing a solar panel."

Although the policy has been successful (in 2012, 8.5% of households in Flanders had installed a solar panel), the authors conclude that reducing the cost of installation would have even better results as this is the cost that is most overvalued by consumers.

"Consumers undervalue the benefits relative to the costs of adoption. A reason could be that people think that they might move in the near future, which could lower the return on their investment, or they don't entirely trust the government to continue subsidies in the future. We're not sure which reason plays a greater role, but we're confident that decreasing the cost of adoption would be more effective than subsidising over a long period of time."



Olivier De Groote,  
TSE-UTC Assistant Professor  
Econometrics & Empirical Economics

Decreasing the cost of adoption for solar panels would have been more effective to convince consumers than subsidies spread over a long period of time

## Educational choices

Olivier has also studied the education preferences of students in Flanders. Using a dataset tracking Flemish students over a long period of time, he was able to determine whether their choices had positive or negative impact on their careers. "In the Belgian education system, students have to choose education tracks starting at age 12. They can then change every year, but almost only from more academic to less academic tracks. At the end of each year, teachers hand out a certificate with an A, B or C grade which indicates whether the student should pursue the



current track or change for a less academic career. Students with the lowest score, a C, have to repeat the grade. Students with an A usually stay on their path but students with a B have to choose between switching track or repeating the grade."

Analysing the impact of these grades, Olivier suggests that B-grade students ought not to repeat a class. "It's better for students to change tracks following a B grade than to repeat a year because our data indicate that forcing them to change

tracks does not decrease higher education graduation, while repeating does and it takes one more year for these students to get their degree."

A new policy, currently being discussed by the government, plans to make repeating impossible for B-grade students, directly applying the results of Olivier's research. "They're going to abolish the option of repeating grades, which is a good answer to the issues I noticed in my work."

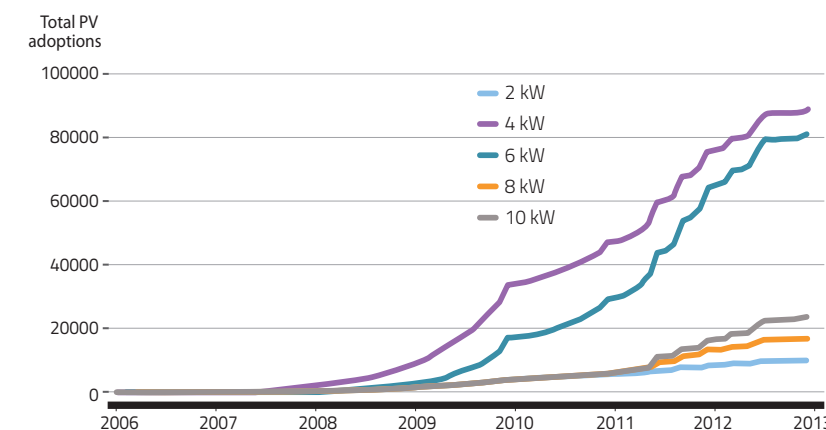
## Future work

Olivier has also started to work on several other research projects. "In joint work with Koen Declercq, I am currently working on a dataset of 100,000 students from a wide range of schools. I'm trying to see if going to a more academic, 'elite', school gives students more chances to get a high school degree."

The results have been surprising. "The first results indicate that students from these schools are more likely to graduate from high school, but once you take selection into account, we notice the opposite effect. This could be because students at these schools who aren't very good at academic tracks have to completely change schools to get a more suitable track, and they're less likely to do so than students enrolled in more general schools."

Olivier would also like to study childcare choices and allocation systems to improve the matching of children to childcare options. "Right now in Belgium, as in many other countries, applying for a childcare solution is the first thing parents have to do once they know they're expecting."

2006-2012: Solar panel adoption in Flanders, according to capacity





# IDEAS IN ACTION

## A focus on public policy

As trust in our politicians, institutions and experts declines, the need for academics to engage with society is greater than ever. In this section, Jean Tirole and his TSE colleagues call on economists to inform the public debate, armed with cutting-edge tools for evaluating policy decisions. We also present some of the latest policy solutions from the TSE ideas factory, defending the public interest on issues ranging from digital privacy to advertising, fat taxes, recessions and higher education.

- 12 The power of ideas
- 14 Long live the credibility revolution!
- 16 Policy solutions
- 18 Are students on the right track?



# The power of ideas

**W**e are living through a period of public mistrust for academic expertise, says TSE chairman Jean Tirole. But in these excerpts from his book 'Economics for the Common Good', he argues that economists have a collective responsibility to continue to engage in public affairs. And as the research in this special issue suggests, the opportunities for economists to improve public policy are greater than ever.

The implicit contract between the citizen-taxpayer and the researcher that has been in force for the past 50 years is being challenged with increasing frequency. Public mistrust for academic expertise – particularly in real-world areas such as economics, medicine,

the theory of evolution, climate science, or biology – has been exacerbated by the scientific community's errors, such as the failure to remove harmful drugs from the market, or scientific fraud involving nonexistent or falsified data. Economists, as for them, have been blamed for their failure to predict the 2008 financial crisis.

Confronted with these criticisms, the academic community ought not to retreat en masse into the "ivory tower". While some valuable researchers lack the appetite or ability to participate in public life, others are well equipped to respond to the need for independent experts to engage with society, to contribute to debates in decision-making bodies, and in the media.

## The humble economist

The duty of an academic is to advance knowledge. In many cases (mathematics, particle physics, the origins of the universe) perhaps we should not be too preoccupied with the application of knowledge, but only with finding the truth – applications will come later, often in unexpected ways. Research driven only by the thirst for knowledge, no matter how abstract, is indispensable – even in the disciplines that are naturally closest to real-world applications. But academics must aim to make the world a better place; as a community they cannot refuse, as a matter of principle, to take some interest in public affairs.

Economists, for example, should help to improve sectoral, financial, banking, and environmental regulations, as well as competition law; to improve our monetary and fiscal policies; to reflect on how Europe is organized; to understand how to overcome poverty in developing countries; to make education and health-care policies more effective and fair; to foresee the development of (and provide remedies for) inequality; and so on. They should also take part in government hearings, interact with the administration, and sit on technical commissions.

**Academics must aim to make the world a better place; as a community they cannot refuse, as a matter of principle, to take some interest in public affairs**

Researchers have an obligation to society to take positions on questions about which they have acquired professional competence. For researchers in economics, as in all other disciplines, this is risky. Some fields have been well explored, others less so. Knowledge changes, and what we think is correct today could be reevaluated tomorrow.

Finally, even if there is a professional consensus, it is never total. Ultimately, a researcher in economics can, at most, say that, given the current state of our knowledge, one option is better than another. Similarly, a climatologist may indicate areas of uncertainty regarding the extent and causes of global warming but can also usefully present likely scenarios have given the current state of



**We must maintain a balance between humility and the determination to convince others of the usefulness of our knowledge**

our knowledge. A professor of medicine can likewise give an opinion on the best way to treat a type of cancer or degenerative disease. Thus, academics must maintain a balance between humility and the determination to convince others of the usefulness of their knowledge. This is not always easy, because others will find certainties easier to believe.

## From ideas to policy

Keynes described economists' influence this way: "Practical men, who believe

themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist." This view is not entirely out of step with reality. Whatever area of economics they pursue, there are two ways in which researchers can influence debate on economic policy and the choices made by businesses.

The first way is by getting involved themselves. Some, overflowing with energy, succeed in doing so, but it is rare that a researcher can continue to do extensive research and be very active in public debate at the same time.

The second way is indirect: economists employed by international organizations, government ministries, or businesses, read the work of academics and put it to use. Sometimes this work is a technical research article published in a

professional journal; sometimes it is a version written for the general public.

The technical nature of microeconomic debates over competition policy, the prudential regulation of banks, or the regulation of network industries (such as telecommunications, trains, electricity, or the postal service) need not be an obstacle to policy decisions being based on this research. In fact, decision-making power in these areas has often been entrusted to independent authorities such as a competition authority, central bank, or sectorial regulator. These authorities are much less politically constrained than ministers in their choices, and they can more easily incorporate technical and economic knowledge into their decisions. Since Keynes made his grim observation, the journey from ideas to actions has accelerated. ■



SYLVAIN CHABÉ-FERRET AND NICOLAS TREICH ON EXPERIMENTAL METHODS

# Long live the credibility revolution!

**R**ecent advances in statistical analysis and access to microeconomic data have facilitated the use of experimental methods for evaluating public policies. TSE's Sylvain Chabé-Ferret and Nicolas Treich explain why these state-of-the-art techniques have accelerated the conversion of economics into a true empirical science that can radically improve the transparency and evaluation of public decisions.

The experimental evaluation of a public policy uses the same principle as clinical trials in medicine: two groups are randomly selected from the same population, one benefiting from the policy while the other serves as a control. The impact of the policy is measured by comparing the two groups: beneficiaries and non-beneficiaries. In practice, there are several types of randomized interventions that allow experiments to be adapted to suit the policy being evaluated.

**Experimentation must be seen as a 'continuous learning process', with an evaluation system that is revised throughout the life cycle of the policy studied**

Quasi-experimental methods use pre-existing observational data to estimate the effect of a public policy by attempting to get closer to experimental conditions. Quasi-experimental methods are useful because they mobilize fewer resources and avoid the ethical, political and behavioral problems that can result from randomized allocation.

## The French context

Experimental methods have long been used by US regulatory agencies and international

bodies such as the World Bank. In France, the development of these methods to aid public decision-making is much more recent and modest. The progress of experiments appears to be limited by various factors, including the political and ethical problems raised in French culture by the random selection of samples and the accessibility of individual data. The political limits have been greatly reduced since the Constitutional Law of 28 March 2003 allowing derogations from the principle of equal treatment for experimentation purposes. The ethical pitfalls have also been reduced by universities' use of ethical committees to evaluate experiment plans. However, another obstacle is that few public decision-makers are familiar with the different design possibilities and new statistical techniques.

## Continuous learning

Traditional policy evaluation tools are largely based on *ex ante* methods, such as cost-benefit analysis, using assumptions about the expected effects on the economy. In practice, *ex ante* evaluation is complicated, especially for social policies (assistance to return to work, encouragement to study, response to subsidies, etc.) whose expected effects depend on the human factor. It is difficult to anticipate beneficiaries' reactions because they vary according to characteristics specific to each individual.



**Sylvain Chabé-Ferret**  
Assistant professor, TSE-INRA



**Nicolas Treich**  
Senior researcher TSE-INRA

Consequently, it is important to experiment with proposed measures by first applying them to small groups. Experimentation must be seen as a continuous learning process with both *ex ante* and *ex post* evaluations which are revised throughout the life cycle of the policy studied.

*Ex post* evaluation has been used extensively in the areas of work, education and development, where a thorough understanding of behavior is critical. *Ex ante*



**Experimental methods have contributed to the evolution of the economist who advises, assists and evaluates public policy**

evaluation, meanwhile, has been widely applied in areas such as transport, energy and the environment, where policies can have significant long-term macroeconomic effects and the value of *ex post* approaches is less clear. For example, it is hard to imagine how to simulate long-term impacts for a planet with or without a climate policy. However, recent *ex post* studies may help us better understand the long-term impacts of climate policy by exploring the links between climate policy and greenhouse gas emissions, or between temperature and climate damage.

## Economist as plumber

The empirical approach in economics, and especially the evaluation of public policies, is not limited to experimental and quasi-experimental methods.

Structural econometric methods, which use behavioral models to predict the consequences of public interventions, are also very useful. Structural models have also benefited from the credibility revolution, as their *ex ante* or model-based predictions are increasingly compared with *ex post* observations.

These advances have contributed to the evolution of the economist who advises, assists and evaluates public policy. For

a long time, economists guided public policy mainly by proposing robust and rigorous principles to evaluate policy decisions. Now, economists have become involved in the details of the implementation of policies, working upstream with decision-makers to design the trial, implementation and evaluation of feasible and credible policy alternatives. After the advent of the economist as engineer, we see the emergence of the economist as plumber (Duflo 2017).

## Do green subsidies work?

Under the EU's Common Agricultural Policy, subsidies are paid to farmers who adopt environmental practices such as crop diversity or organic farming. It is likely that many farmers receiving the subsidies already used these practices. Thus, using the non-subsidized group as a counterfactual would overestimate the policy's impact on environmental practices. In 'How much green for the buck?' (2013) Sylvain and co-author Julie Subervie use the double difference method instead, comparing environmental practices by subsidized and unsubsidized farmers over two time periods, before and after the introduction of subsidies.



Sylvain and Nicolas's 2017 paper 'Evaluation of Public Policies: randomized experimentation and quasi-experimental methods' is an accessible introduction to experimental methods, available to read at [www.tse-fr.eu](http://www.tse-fr.eu)



# What's the best solution?

As the breadth of TSE research continues to expand, its scientific rigor, cutting-edge statistical techniques and international collaborations have produced new results with an exciting range of real-world applications. In the spirit of Jean Tirole's call for academics to make the world a better place, we feature some of the latest contributions from Toulouse economists in the search for effective responses to society's greatest challenges.

Patrick Fève,  
Pablo García  
MACROECONOMICS

## LEAN INTO THE WIND

*"State-dependent risk taking  
and the transmission of monetary  
policy shocks", 2018*

Low interest rates under favorable economic and financial conditions in the early 2000s may have produced overconfidence in economic agents, contributing to the recent global financial crisis. Using a new measure of risk sensitivity, Patrick and Pablo show that the link between monetary policy and risk-taking behavior is irrelevant during recession or normal times, but acts as an amplifier by boosting output during expansion. If monetary policy does not actively "lean against the wind", they warn, it may exacerbate boom-bust patterns.



Rodrigo Montes,  
Wilfried Sand-Zantman  
DIGITAL DILEMMA

## PRICING PRIVACY

*"The value of personal  
information in online markets  
with endogenous privacy",  
2018*

What are the effects on prices, profits, and consumers when firms can use consumer data to price discriminate but consumers can prevent this by paying a "privacy cost"? Unlike a monopolist, competing duopolists do not always benefit from a higher privacy cost because it decreases each firm's profit, and increases consumer surplus. The optimal strategy for consumers is to sell their data to only one firm, maximizing the stakes for rival buyers. The resulting inefficiencies imply that policymakers should devote more attention to discouraging exclusivity deals and less to ensuring that consumers can easily protect their privacy.



Andrew Rhodes  
HARD TRUTHS  
SHOULD ADVERTISERS  
COME CLEAN?

*"False Advertising", 2018*

In Andrew's model, policymakers are able to punish firms that mislead consumers about their products. He finds that tougher legal penalties reduce the frequency of false adverts, but also increase their credibility. This research shows when and how stronger penalties can reduce social welfare. In particular, by using some results on demand curvature, it provides precise conditions on demand and market parameters such that a policymaker optimally uses a low penalty to permit a strictly positive level of false advertising.

Helmuth Cremer,  
Catarina Goulão  
and Kerstin Roeder

HEALTH  
FAT TAXES



*"Earmarking and the political  
support of fat taxes", 2018*

Food and soda taxes have been shown to be effective instruments to reduce the consumption of unhealthy goods which lead to obesity and chronic diseases (like diabetes). However, since poor individuals have a higher consumption of these goods, the taxes tend to be regressive, which undermines their political support. Consequently majority voting usually implies a tax that is too low. The authors show that the political support depends on the use that is made of tax revenues and studies how "earmarking rules" can be used to boost political support. Using them to finance healthy consumption may appear to be a natural "selling strategy", but this is not true because this would exacerbate the regressive impact of fat taxes. Instead, part of the tax revenue should be used to reduce health insurance premiums.

Franck Portier  
RECESSIONS  
HAYEK OR KEYNES?

*"Reconciling Hayek's  
and Keynes Views of Recessions",  
2018*

According to Hayek, governments should not spend their way out of recession, as this is often a necessary period of adjustment following over-investment. For Keynes, recessions are periods of deficient demand that require activist fiscal policy. Franck and his coauthors reexamine recessions in a setup where prices are flexible but not all trades are coordinated by centralized markets. Their model suggests that Keynes' and Hayek's views may be closely linked, leaving policymakers to face an unpleasant trade-off: stimulus postpones adjustment and prolongs recession, but some stimulative policies remain desirable when consumers are too cautious.





NINA HESTERMANN AND NICOLAS PISTOLESI ON DEGREE MATCHMAKING

# Are students on the right track?

**I**n France, where universities are not allowed to impose entry requirements and students are free to choose their field of study, undergraduate drop-out rates are extremely high. In a new paper, 'Does the Provision of Information on their Skills Affect Students' Enrollment Choices?', TSE researchers Nina Hestermann and Nicolas Pistolessi examine the government's efforts to help students make better decisions.

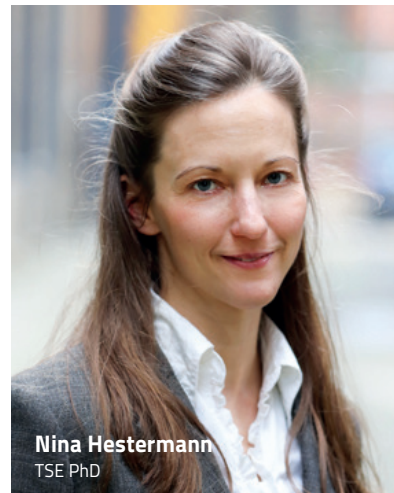
More students are going to French universities than ever before. Over the past decade, registration for degree courses in healthcare and law has risen by 30% and 18% respectively. Encouraging success for such a large number of students from diverse educational backgrounds represents a major challenge for the French education system.

**Many students seek to enter degree courses they are ill prepared for, paving the way to low performance, discouragement, and subsequent drop-out**

Faced with this situation, the French government adopted a number of policies to increase the proportion of students completing their undergraduate studies. Many seek to enter degree courses they are ill prepared for, paving the way to low performance, discouragement, and subsequent drop-out. A majority of those failing the final examinations of their first year (about 50 % of each entering cohort), are likely to do so due to a mismatch between course requirements and their skills.

## Free advice

The 2009 Active Orientation (AO) policy informs high-school students about their chances of success in the degree courses they intend to apply to. Most



universities elect to give students written feedback on the quality of the match to their chosen degree course, given their grades and motivation letter. As these recommendations are not binding, it is important for universities and policy-makers to assess whether prospective students take this feedback into account when deciding where to enroll, particularly in the case of the weakest students who run the highest risk of failure.

In their paper, Nina and Nicolas focus on students who are encouraged to reconsider their enrollment choices because their skills, notably in mathematics and abstract reasoning, may not be sufficient to complete the degree. The data

they use stem from the departments of a large French university, one of which elected to give all prospective students the type of feedback described above, while the other departments do not. The researchers take advantage of this natural experiment to compare enrollment rates for the different departments before and after implementation of the feedback policy, thus obtaining an estimate of the policy's causal effect.

**The researchers' results indicate that the academically weakest applicants reconsider their choices when advised against enrolling**

## Changing course

The researchers find that receiving negative feedback reduces the proportion of students enrolling for the degree course by 7 percentage points. This drop is a sizeable effect when compared to an average enrollment probability of 35 per cent before implementation of the policy. This indicates that the academically weakest applicants, who may also be the least well informed about course requirements, reconsider their choices when advised against enrolling. In other words, the AO policy does seem to help attenuate mismatches between students and degree courses.

The deterrence effect of receiving negative feedback varies in size among the relevant degree courses and is not always significant at the 10 percent level. The effect is greater for students living in the same region as the university, and for those whose chosen specialization in high-school is less relevant to the subject of the intended degree course.

Different approaches may lead to sizeable differences in effect sizes. A 2016 companion study by Nicolas uses the same



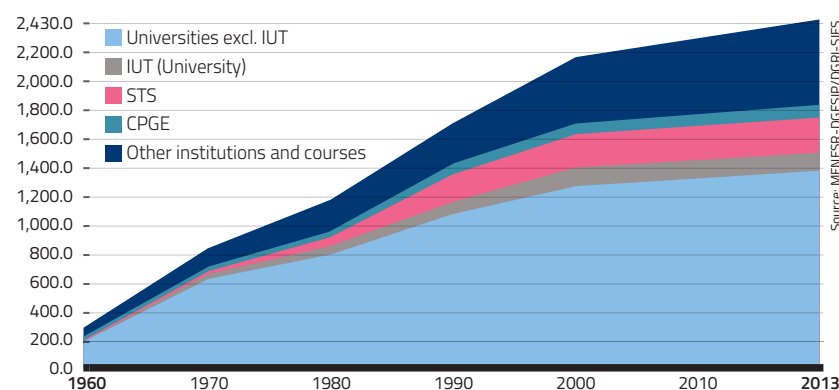
data but takes advantage of a threshold grade in mathematics below which university staff are expected to indicate their reservations about the student's choice. This allows him to compare the decisions of students whose grades are just below the threshold to those with grades just above it. Apart from the advice they receive, these two groups are very similar. In this setting, negative feedback diminishes the probability of enrollment by about 14 percentage points. The difference between the two studies' results suggests that students close to the threshold are the most likely to modify their decision after negative feedback.

## Thinking ahead

Nina and Nicolas aim to conduct a closer examination of the effectiveness of the feedback policy, looking at the destination of students who change their mind. They also want to investigate the possibility of changes in drop-out rates after the first year, in mean grades in first-year exams, or in graduation rates after three years. To evaluate the AO policy, it is crucial to find out if it helps students achieve better results, and if those students who ignore negative feedback do worse in their future studies.

## Students enrolled in higher education since 1960 (in thousands)

Coverage: Metropolitan France + overseas departments (DOM)



## Informed decisions

Many recent studies show how decisions about education can be improved by providing additional information. In Jensen (2010), Dominican Republic eighth graders complete more years of study if they receive information about the true benefits of education. Meanwhile, Bettinger (2012) finds that students from disadvantaged backgrounds who receive assistance in applying for financial aid have higher college attendance and persistence rates. Remarkably, benefits even trickle down a generation: two-year college completion rates increased by 8 percentage points among the children of the study's original participants.



MICHEL PÉBEREAU AND NICHOLAS RAWLINS ON THE FUTURE OF TSE

# TSE's campaign: 'Toulouse Talent – Global Impact'



Michel Pébereau



Pr. Nicholas Rawlins

## Michel Pébereau

Chairman, Jean-Jacques Laffont  
- TSE Foundation  
Honorary Chairman, BNP Paribas  
Chairman, 'Toulouse Talent – Global  
Impact' campaign

## Pr. Nicholas Rawlins

Vice-President for International  
Affairs and Development, TSE  
Professor of Psychology

**T**SE is a unique adventure imagined 40 years ago by a visionary economist, Jean-Jacques Laffont. In 2007, an exceptional joint public and private initiative gave birth to the JLL-TSE Foundation and the TSE label, with a total investment of €80 million. The fundraising success of this first campaign was largely inspired by Michel Pébereau, at the time Chairman of BNP Paribas and today Chairman of the JLL-TSE Foundation. This initial campaign made a bold and pioneering departure from the usual French reliance on state funding for academic research and short-term spending.

Ten years after this first fundraising success, a second campaign is currently underway. Michel Pébereau joins Nicholas Rawlins, TSE's Vice-President for International Affairs and Development, to tell us about this new endeavor.

### What inspired you to take part in TSE's fundraising campaign?

**MP:** With the advent of a global knowledge economy, it is important to support institutions such as TSE. Academic research provides a powerful locomotive of innovation for all economic actors and public debate. In its own way, TSE contributes to the economic competitiveness of France and also plays an essential role in training tomorrow's top economists.

**NR:** The TSE project is a really interesting one. It focuses some of the world's most distinguished academic work in economics on real-world problems, applications, and policy, while including a wealth of multidisciplinary input coming from the humanities and natural sciences – well beyond what the social sciences alone can do. So, the people, and what they're doing, are really first rate. The aim now is to give TSE and IAST the resources to take this project to still further heights: for theory and experiment to be able to go wherever the data may take them, using the best possible analytic tools and training the leading economists of the

In its own way, TSE contributes to the economic competitiveness of France and also plays an essential role in training tomorrow's top economists

future. That's simultaneously exciting and worthwhile. And fun.

### Why is a second campaign needed?

**MP:** This campaign is strategic for TSE because its main purpose is to give TSE additional financial means to compete seriously with the very best research institutions in the world in today's global market. We need to create the kind of attractive and competitive environment that will bring the best possible talent from all over the world to TSE.

**NR:** The 'Toulouse Talent-Global Impact' campaign has three priorities: attracting and retaining talent by funding endowed professorship chairs and endowed research activities, educating young talent and investing in state-of-the-art facilities. The focus on endowment means



that we want to continue to secure funding in the long term. This second campaign is not just about TSE today or in the three or five upcoming years, it's a huge step forward for our successors.

### What are the results of this campaign so far?

**MP:** The campaign has officially been running since 2016 and will continue until 2020. Thanks to the first campaign, we created the TSE Partners Association. A group of a dozen major donors has already gathered more than half our target of €50 million after only one year.

**NR:** Support has been mainly corporate and from France so far (with one exception – see page 24). We are now looking both for individual and for international support, which is natural for us as we are a truly global institution. There are 90 student nationalities on campus, and both faculty and students are pretty much 50/50 French

and foreign. We have already received donations from the US, only a few months after creating American Friends of TSE. In addition, the Jean-Jacques Laffont Foundation can also benefit from the Transnational Giving Europe Network, which is a network of prestigious philanthropic institutions collaborating internationally to foster charitable giving within Europe which covers 19 countries (Belgium, UK, Germany, Switzerland...).

### Who are TSE's donors and why do they support TSE?

**MP:** As for the Partners, support mainly comes from the finance and investment sectors (Axa, Banque de France, BNP Paribas, Caisse des Dépôts, Crédit Agricole), the economy network sector (La Poste, Orange) or the energy sector (EDF, Engie, Total). A few months ago, the foundation also received major support from the Toulouse-based firm Airbus. BNP Paribas is proud to support TSE since its early days and continues its support

today, as it brings vital information and greater understanding to the general public about the market economy.

**NR:** Individual donors will each have their own motivations. Some will almost certainly be alumni, who want to help their own successors or honor their teachers. Others will come from wider networks of friends and family, like Mrs Noëlle Meyer's most generous gift in memory of her husband Georges Meyer, or from those who admire the work going on here. There will also be foundations which see TSE as a perfect way to advance their own charitable aims (the Sloan Foundation is already one of them).

### What is so unique about TSE's campaign?

**MP:** What is quite singular about this campaign is the nature of a large part of the funding: endowment. Only the interest generated by the endowment is used to fund programs. The ideal ...





... is that, someday, this endowment might generate sufficient income for all TSE's needs which are not covered by other types of funding, such as public funding or research contracts. TSE will then be able to quickly try out new ideas and develop pilot programs. That's essential if we want to be responsive and truly innovative.

**This campaign is strategic for TSE because its main purpose is to give TSE additional financial means to compete seriously with the very best research institutions in the world in today's global market**

**NR:** Jean Tirole's involvement is an extraordinary asset for this campaign, but success will only come from a team effort. The impacts that TSE and IAST have are derived from all our researchers, our students and our staff, and their interactions with each other and the wider world. While economics will always remain at the core of our activity, TSE has recognized that interdisciplinary research is crucial for addressing some of today's hardest questions on human behavior. IAST builds on that vital capacity.

**What kind of donation can the Foundation receive?**

**MP:** The JIL-TSE Foundation is a scientific cooperation which benefits from the same privileges as a public interest foundation. This status allows

the Foundation to receive legacies and other donations. They can be non-designated or with a focus on a specific project. And I'm happy to mention that donors can benefit from a preferential tax regime which has a leverage effect on the amount of gifts. The JIL-TSE Foundation could also shelter the foundations created through considerable gifts from major donors. The pathways to philanthropic development are very diverse!

**Why is it important to involve TSE's researchers and students in this campaign?**

**NR:** I often think of development offices as acting as interfaces between those whose work is going to be supported and those who might be willing and able to provide that support. The key role lies in making the right connections between these two parties. A good development office will faithfully represent the researchers and their research to the outside world, but that's just the

beginning. What really inspires donors is the enthusiasm, knowledge and commitment of the researchers themselves, from the most senior and distinguished professors to the research students who may just be starting out but will be the stars of the future. It's the stories that they alone can tell. And at a different level, it's vital for any campaign to deliver what people really want!

**What can we learn from British universities such as Oxford and Cambridge which have a long tradition of attracting donations through university foundations?**

**NR:** I think that the key lesson lies in forging lasting relationships between the institution and its supporters. People donate for many reasons, but one very powerful one is because they want to be part of the story that the institution tells, and to know that what they do makes a difference to something that matters. So, it's important to keep in touch, to show our appreciation in appropriate ways, and never to take our friends and supporters for granted.

## Scholarship opportunities

The Jean-Jacques Laffont – TSE Foundation and the Jean-Jacques Laffont Association support talented students by funding scholarships for Master's studies and PhD grants.

**“** After finishing a Degree in Economics at the French University Pole in Hô-Chi-Minh City, I really wanted to further my studies in Economics at TSE. The “Jean-Jacques Laffont scholarship” I was awarded has been a decisive factor in my decision to embark on my journey at TSE. **”**

**Anh Nguyen**, M2 Economic Theory and Econometrics, TSE, 2018 – 2019



**“** The Jean-Jacques Laffont scholarship offers me the opportunity to be immersed in a high-level research environment, setting a tone for my future studies. I'd like to pursue PhD studies at TSE. **”**

**Karen Trujillo Jara**, M2 Public Policy and Development (International Track)



To support or learn more about the campaign, visit [tse-fr.eu/campaign](https://tse-fr.eu/campaign)



# A common interest



Thomas Coutts



Milena Mileva

## Thomas Coutts

Partner International Equities  
Baillie Gifford & Co

## Milena Mileva

Co-manager of the Baillie Gifford UK Growth  
Fund plc

**B**aillie Gifford is one of the UK's top-performing investment management houses. Founded in 1908 in Edinburgh, today it has close to £200bn in assets. In 2018, Baillie Gifford decided to support the TSE Sustainable Finance Center as a corporate patron. Thomas Coutts, a partner at the firm, and Milena Mileva, co-manager of its UK Growth Fund, visited Toulouse to formalize this new partnership. They talked to TSE Mag about the company, the importance of economics and the motivations of Baillie Gifford's gift to TSE.

*What differentiates Baillie Gifford from other investment management firms?*

**Thomas Coutts:** We are a private partnership, fully owned by 44 people who work in the business, which means we have a mechanism for handing ownership from one generation to the next. More importantly, we take a very long-term view in how we do things, avoiding many of the problems of the financial markets that mainly arise due to short-term horizons. I've been at Baillie Gifford for 19 years and I might be halfway through my career.

**Milena Mileva:** I've been at Baillie Gifford for 10 years, a third of my career.

**TC:** The partnership structure is critical.

*What can you tell us about the company culture?*

**MM:** It's special because of the long-term approach. We invest on a long-term view, which means we take care of our clients' money on a long-term view, and we take care of our people on a long-term view. It's a consistent application of this philosophy internally, in the way we organise ourselves, and in the way we invest.

**TC:** I am glad you said that. We try to look after people in the right way and to treat them as human beings.

*Have you found your dream job?*

**MM:** Yes, without a shadow of a doubt.

**TC:** It's not what I expected to do when I was 10. In that sense, no. But yes, it's a job where you are intellectually stimulated. You're working with interesting people, meeting fascinating people from around the world and in different environments.

It's not like we are saving lives but we are improving the financial wellbeing of our clients; and we've managed to do a good job over time. There is a purpose to it, at least in the way we do it. I wouldn't necessarily say that about the industry as a whole.

*What makes you so good at your job?*

**MM:** 'Curious about the world' is the slogan at Baillie Gifford. We employ people who are very curious about figuring out how things work and I am one of them. I have always been very curious about solving puzzles.

**TC:** Maybe also a sense of perspective and balance. I hope the fact that I think about what we do in a broader social context, rather than through the narrow lens of the financial industry, makes me better at my job.

I didn't know what I wanted to do when I was a student. I was a teacher for a year, then I worked for a financial publishing company for a couple of years and



**We read some books and articles by Jean Tirole and Christian Gollier and found that we share a common interest in many topics**

I slightly stumbled across investment. I worked out through the publishing company that it seemed like an interesting job, quite research focused, and that appealed to me.

**MM:** I think also humility, both professionally and personally. You can have a lot of ambition to grow and become better but you should do it in a humble way. And it is very important for us because we take care of people's assets and we invest alongside the people that run businesses.

**TC:** Yes, it's the beauty of the job that you should be getting better at it every day. There is always more to learn: more companies to look at, books to read, academics to follow, businesses to understand, more about yourself to know.

*When looking for an institution or a person to support financially, do you use the same method as if you were looking for a company to invest in?*

**TC:** Yes, probably. It's a great question. In companies, we are looking for a culture of excellence, long-term growth prospects and people you trust. And those elements are in place at TSE. But you might frame growth in a different way, rather than revenue growth at companies we invest in.

As Milena said, we look for a culture of being curious about the world. Here, we see the desire to marry the theoretical world of economics and finance to real-world problems, and to try to propose solutions. That intersection of the theoretical and the practical fascinates me, and it's very relevant to what we do.

*What attracted you to TSE?*

**TC:** The work that your researchers are doing is both interesting in itself and deeply relevant to the world. We read some books and articles by people here, such as Jean Tirole and Christian Gollier, and found that we share a common interest

in many topics. There is some great work being done here and we are delighted to support it.

**MM:** TSE brings a sort of interdisciplinary approach even within economics as a field, with its many different sub-disciplines. These guys all seem to be joined up which must be a strength.

*How can research on sustainable finance benefit a company such as yours?*

**TC:** We must stay relevant to our clients, and our clients are representatives of society more broadly. Too often people in the financial industry regard themselves as being separate from the rest of the world. You do your day job in the financial world, then you leave your work and engage with the society you live in, but the two aren't thought about together. That seems an unnatural and unhealthy mental separation.

If you're taking a long-term perspective when you invest, as we do, you must also think about the sustainability in a broad sense of the companies you





Baillie Gifford's Tom Coutts and Milena Mileva with Christian Gollier (TSE-UTC) and Sébastien Pouget (TSE-UTC)

... own on behalf of your clients. The nature of their relationship with their customers, how they treat their employees and suppliers, how, ultimately, they fit into the society where they exist.

**China is now the second largest economy in the world and will overtake the US in all probability over the next 10 years**

**MM:** And, because our clients have very long-term horizons like pension funds, you need also to think about their beneficiaries and future generations.

**Are you interested in making sustainable investments?**

**TC:** Yes, in the broad sense we just outlined, if you take a long-term view you must think about the sustainability of the businesses we invest in. And more narrowly yes, too, we have a strategy called Positive Change which we set up a couple of years ago following a proposal from a young colleague. This is a strategy with twin objectives to which we attach equal weight: one

focused on delivering good long-term investment returns, and one focused on delivering positive social impact through the companies we invest in. This strategy has been running for about 18 months and it has sparked a lot of interest externally and internally. We've learnt a huge amount already, and I suspect we will do a lot more of this sort of thing over the coming years.

**What are the current big trends in investment?**

**MM:** There are many exciting technological developments but I am sure you could have easily said that 50 years ago; so, I don't know. Trends in investment could be dangerous things.

**TC:** I would prefer to say there are trends in the world that affect the way we invest. One of those is the continuation of rapid technological change and the opportunities that opens up in a variety of industries. Both to grow, to develop new businesses and, as Schumpeter described, to destroy incumbents.

**MM:** Ultimately to increase productivity to society.

**TC:** Another trend would be the reemergence of China, which has been going on for about 40 years. But it is now the second largest economy in the world and will overtake the US in all probability over the next 10 years. That is a broad trend that is likely to continue for the next 20-30 years, at least for the rest of my career. If you think about investment trends in a narrower sense, there are things like FinTech, which is a bit of a broad label for a whole range of interesting things.

**MM:** Also, there has been significant growth in passive investing. We, in contrast, are active investors. We are encouraging people to have a balanced debate of the merits of the two approaches, but we would caution against the idea that the best way to invest is simply to mimic a benchmark. As Tom has said, there are a lot of things that are wrong with our industry, not least the cost structure, but equally there are pitfalls in passive investing, perhaps particularly when it comes to some of the broader social considerations we touched on. We think a broad, deep, well-informed debate about the issues is needed. ■

# What is the biggest hurdle toward efficient public policies?

1. Lack of communication
2. Lack of democracy
3. Lack of evaluation
4. Lack of transparency

**GIVE YOUR OPINION ON DEBATE.TSE-FR.EU/POLL**

## RECENT POLL RESULTS FROM TSE DEBATE:

**52%**  
think blockchain will be the future of finance

**88%**  
believe tomorrow's Europe will be federal

**80%**  
would regulate more strictly the food industry

**78%**  
are worried about companies using their personal information

[debate.tse-fr.eu](https://debate.tse-fr.eu)



# Recruiters trust TSE graduates

Results of a poll  
 conducted 6 months  
 after graduation on our  
 graduate's employment  
 (Toulouse Capitole University)  
 March 2018

96%



feel that their positions  
 match their Master  
 specialty

hold  
 an executive  
 position

86%



93%

found a job within 6 months



CLASS OF  
 2017



64%

signed their employment  
 contract before  
 graduation

40%

found a job in a different  
 country from their origin



72%

were hired in a  
 permanent position



## KEY EMPLOYERS

Airbus, BNP Paribas,  
 Capgemini, Compass  
 Lexecon, Deloitte, EY, Lincoln,  
 NERA Economic Consulting, OECD,  
 Paris Aéroport, PSA Group, United  
 Nations, Société Générale, World Bank, ...



# “I wouldn't be where I am today without TSE”

**A**lumni from our master's degrees share their views of TSE and the latest trends in their fields. Their different testimonies illustrate the pertinence of TSE teaching strategy as well as the rising need for data scientists in many different industries.

“The TSE brand was a key factor in my recruitment. It is extremely well perceived and there is a clear lack of individuals with statistics knowledge and programming skills at the moment. Machine learning is a key skill for data scientist and artificial intelligence will become the “big thing” in a near future.”

**Romain Ledoux, Consultant - Ernst & Young**  
ECONOMICS AND LAW

“In my field, versatility is the most sought-after skill. In my master's degree, I learned key competencies and knowledge that I use every day, including the ability to analyze any issue with a big-picture approach.”

**Etienne Feutren, Engineer - CITEPA**  
(Atmospheric pollution analysis center)  
ENVIRONMENTAL AND NATURAL RESOURCES ECONOMICS

“At TSE, I developed analytical and data-interpretation skills which allow me to precisely understand and comment on results from different studies. The TSE degree is very highly regarded at the World Bank.”

**Aram Gassama, Field Coordinator - World Bank**  
PUBLIC POLICY AND DEVELOPMENT

“There's a big push for data-driven solutions at the moment. My master's combined focus on theory and applied projects allowed me to develop strong coding skills along with a good understanding of the theory behind economic models. I wouldn't be where I am today without TSE.”

**José Alvarez, Consultant - Deloitte**  
ECONOMETRICS AND EMPIRICAL ECONOMICS

“This masters gives a complete education for regulation and competition careers where economists with solid statistical and programming skills are in high demand. Regulatory bodies' data-collecting power offer a unique opportunity to fully exploit what we learn at TSE.”

**Vincent Claraz, Economist - ARAFER**  
(France's rail and road regulator)  
ECONOMICS OF MARKETS AND ORGANIZATIONS

“The courses on industrial organization at TSE have helped me tremendously in understanding the telecommunications industry in the digital age. TSE is well-known by regulatory authorities.”

**Hélène Bout, Economic Analysis and Digital Intelligence - ARCEP**  
(France's telecoms regulator)  
ECONOMICS OF MARKETS AND ORGANIZATIONS

“The way people work in the finance industry is evolving towards more collaboration and adaptability. TSE's training gave me the tools and methodology to successfully do my job today.”

**Emilien Simioni, Business Developer - BinckBank**  
FINANCE

“The statistical analytics tools I learned at TSE have been of immense help. In my field, PhDs are appreciated and sought after, as well as quantitative analytics techniques and strong writing skills. Tomorrow's recruits will likely be hired for their problem-solving skills and critical thinking.”

**Joaquin Urgel, Consultant - OECD**  
PUBLIC POLICY AND DEVELOPMENT

“My job is constantly evolving, mostly through big-data and machine-learning techniques. The number of data scientists in every department is swiftly growing. The skills I picked up at TSE allow me to tackle many different issues, including non-statistical ones.”

**Johnatan Vincent, Inspector - Société Générale**  
STATISTICS AND ECONOMETRICS





SEASON'S GREETINGS  
AND A HAPPY NEW YEAR  
FROM ALL AT TSE

2019



NEXT SEPTEMBER,  
TSE OPENS A NEW CHAPTER