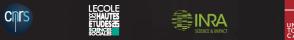


21, allée de Brienne - 31015 Toulouse Cedex 6 - Tel: +33 (0)5 67 73 27 68 - Fax: +33 (0)5 61 12 86 50

Press Contact: Jennifer Stephenson jennifer.stephenson@tse-fr.eu www.tse-fr.eu/press









Mag #4 { Autumn 2013 }

#### **RESEARCH HIGHLIGHTS**

IF TECHNOLOGY HAS ARRIVED EVERYWHERE, WHY HAS INCOME DIVERGED?

DO PRICES & ATTRIBUTES EXPLAIN INTERNATIONAL DIFFERENCES IN FOOD PURCHASES?

> LIQUIDITY SUPPLY ACROSS MULTIPLE TRADING VENUES

#### HOT TOPIC

HOW TO THINK "GREEN" DURING ECONOMIC CRISIS?

#### THE BIG INTERVIEW

**GERARD MESTRALLET** 

#### PARTNERSHIPS

FOCUS ON THE TOULOUSE NETWORK FOR INFORMATION TECHNOLOGY (TNIT)

> ALSO... ÉCOLE TSE • NEWS FLASH • CULTURE

## editors' message

#### Dear friends,

his summer, TSE enjoyed two major moments dedicated to discussions around economics. First of all there was the 1st edition of the TIGER Forum in June, attended by some of the great names in our discipline, such as Eric Maskin, Olivier Blanchard and Jean-Claude Trichet. The overwhelming response for the very first edition of this event encourages us to continue and further enhance this experience. On page 10, we start to lift the veil on the 2014 edition and its prestigious guests and events... In August, we hosted the EAERE Congress: 700 environmental and natural resource economists debated the challenges facing us and the event confirmed the unique role played by TSE in this specialised field.

Two partners of TSE have been kind enough to contribute to this 4th issue of TSE Mag: the CNRS (French National Centre for Scientific Research), through the voice of Patrice Bourdelais, Director of its Social Sciences Department, and GDF-SUEZ, via its CEO Gérard Mestrallet and its Director of Strategy, Edouard Sauvage. These interviews illustrate the dual approach that has created the reputation of TSE as a close partner of both science and industry.

This edition, just like the previous editions of TSE MAG, will also offer you a look at the diversity and excellence of the researchers at TSE: whether they are working on technology, purchasing behaviour, market liquidity, sustainable development or digital networks, they

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demonstrate the rich diversity of the TSE community and their ability to work in fields where you might not expect to find them, but where their work helps to light the way for public and private decision makers alike.

Finally, you will discover the two latest grants given by the European Research Council (ERC) to Patrick Rey and Thomas Chaney, bringing the total number to 11. TSE thus confirms its position as the first French institution in terms of ERC grants in economics by far, with 58% of the total French grants.

■ Jean Tirole Christian Gollier

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#### - Rome St

> PARTNERSHIPS

**Toulouse Network for** 

Information Technology

JEAN TIROLE, TSE

#### **N4**

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Ph.D. at TSE Program reforms

Executive Education EDF-TSE win excellence award

Quarterly magazine of Toulouse School of Economics, 21 allée de Brienne - 31015 Toulouse Cedex 6 - Tel.: +33 (0) 5 67 73 27 68 - Commissioning editor: Christian Gollier Production editor: Joel Echevarria - Editor-in-chief: Priyanka Talim - Graphic Design - Layout - Prepress: A La Une Conseil - Iconography: Studio Tchiz - Photography: CNRS, EEA-ESEM, EFMD, GDF Suez, Olivier Colombe - Printed by: Fabrègue - Circulation: 1500 copies - Printed on recycled paper certified "PEFC" - ISSN n° under request. CHRISTIAN GOLLIER, TSE DIRECTOR

#### > NEWS FLASH

Newcomers 2013 14 colleagues join us

#### New research grants

2 ERCs

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#### **KEYWORDS**

- > Technology
- > Income gap
- > Growth dynamics
- > Development
- > Growth
- > Productivity



May 2013.

### Martí **Mestieri**

## If technology has arrived everywhere, why has income diverged?

In this article, the researchers analyze how technology diffusion accounts for most of the widening in the income gap between rich and developing countries since the Industrial Revolution.

Two-hundred years ago, cross-country differences in income were relatively small. European countries and Western offshoots were on average 90% richer than the rest<sup>1</sup>.

By year 2000, this gap had grown to 750%. Most economic studies of long-run development have tried to relate current income differences to predetermined factors, such as genetic endowments, cultural differences, climate and institutions. Typically, these explorations regress current income per capita on pre-determined drivers, finding high correlations. These exercises, however, are not very informative about the mechanisms by which the dramatic differences in income have emerged across countries or about the timing of the divergence.

In a recent paper titled "If technology has arrived everywhere, why has income diverged?" Diego Comin and Marti studied whether the cross-country evolution of direct measures of technology can induce income dynamics similar to those observed in the data.

#### TWO ADOPTION MARGINS

The contribution of technology to a country's productivity growth can be decomposed in two parts: the extensive and intensive margin. The extensive margin is related to the range of technologies used, or equivalently, to the lag of adoption. The intensive margin captures the penetration rate of new technologies. The more units of any new technology (relative to income) a country uses, the higher the number of workers or units of capital that can benefit from the productivity gains brought by the new technology. Thus, increases in the penetration rate of productivity.

#### EVOLUTION OF ADOPTION MARGINS

They identify the extensive and intensive adoption margins for 25 significant technologies invented over the last 200 years in an (unbalanced) sample that covers 132 countries. Then, they use the estimates to study the cross-country evolution of these two adoption margins. They uncover two new empirical regularities. First, cross-country differences in adoption lags have narrowed over the last 200 years. That is, adoption lags have declined more in poor/slow adopter countries than in rich/fast adopter countries. Second, the gap in penetration rates between rich and poor countries has widened over the last 200 years, inducing a divergence in the intensive margin of technology adoption.

#### INCOME DYNAMICS

They next explore how technology dynamics affect the evolution of income by stimulating the dynamics of income in two representative economies (one "developed" and one "developing"). After feeding in the dynamics of technology adoption we have uncovered in the data, the model generates crosscountry patterns of income growth that resemble very much those observed in the data over the last two centuries. In particular, in developed economies, it took approximately one century to reach the modern long-run growth rate of productivity (2%) while in developing economies it takes twice as much, if not more. As a result, the model generates a 3.2-fold increase in the income gap between rich and developing countries, which represents 80% of the actual fourth-fold increase observed over the last two centuries.

To conclude, it is important to emphasize that this exercise is silent on what forces drive adoption lags and the intensive margin. However, the fact that technology dynamics trace well modern growth suggests that any candidate for a fundamental cause of differences in long-run development should square well with the technology dynamics that we uncover.

1 - These are Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, Japan, Australia, New Zealand, Canada and the United States.

## Pierre **Dubois**

## Do prices & attributes explain international differences in food purchases?

Obesity rate is the highest in the US at 30% compared to 23.6% in the UK and 14.5% in France. In a recent paper, Pierre Dubois along with his co-authors Rachel Griffith & Aviv Nevo studies the difference in food purchase across markets and whether they can be explained by differences in prices and product attributes.

#### AN OVERVIEW OF THE PAPER

Food purchases differ substantially across countries. They used detailed household level data from the US. France and the UK to (i) document these differences: (ii) estimate a demand system for food and nutrients, and (iii) simulate counterfactual choices if households faced prices and nutritional characteristics from other countries. They find that differences in prices and characteristics are important and can explain some difference (e.g., US-France difference in caloric intake), but generally cannot explain many of the compositional patterns by themselves. Instead, it seems an interaction between the economic environment and differences in preferences is needed to explain cross country differences.

#### FOOD FOR THOUGHT

It is well known that the US has poorer health than France and UK. For example, 36.4% of men aged 65+ in the US report having heart disease compared to 28.8% in France and 32.2% in the UK; diabetes prevalence is 21.4% in the US compared to 13.0% in France and 11.2% in the UK. Obesity rates are also the highest in the US at 30.0%, compared to 14.5% in France and 23.6% in the UK. As differences in food purchases seem to be correlated with rates of excess weight gain and diet related illness, economists tend to attribute the difference in food purchases across markets to differences in prices. An alternative explanation is that they are due to inherent differences in preferences and eating habits.

#### THEIR STUDY

In this paper they study the differences in food purchases and nutritional outcomes across these three countries. For example, US households purchase more calories per person. A greater percentage of those calories come in the form of carbohydrates, and a lower share in the form of proteins. A higher share of expenditure is on drinks and prepared foods, and a lower share is on fruits and vegetables. They also document substantial differences in prices and nutritional characteristics like carbohydrates, proteins and fats composition of foods across the three countries. Their main contribution is to develop a model of demand for food products and nutrients allowing to answer whether prices and nutritional characteristics can explain the observed differences in food purchases. This is done using large householdlevel (home scanner) data from France, UK and US that include detailed food purchases for an extended period. They find that, if faced with French prices and product attributes (such as macro nutrients), the average US household would purchase substantially fewer calories: a similar level to the average French household when faced with the same environment. However, the composition of these calories would differ. If only the nutrient characteristics were changed, this has little impact on the amount of calories the average US household obtains, though it does affect the form of those calories, shifting them away from

## > RESEARCH HIGHLIGHTS

carbohydrates and towards proteins and fats. In contrast, when they simulated the average US household's food basket with UK product attributes this has a substantial impact on reducing calories, whereas changing relative prices in fact increases calories.

#### IN CONCLUSION

Pierre Dubois

The results suggest that, while the economic environment, as reflected in prices and attributes, can have a large impact on food purchases and the nutritional composition of the food basket, prices and attributes do not fully explain the observed differences. Price differences mostly explain the large difference in caloric intake between the average French and US household. However, nutrient characteristics are important when comparing to the UK, and differences in preferences and eating habits are generally quite important, and in some cases can offset the influences of the economic environment. For example, they find that UK households have healthier purchasing patterns than US households despite the prices and product offering they face, not because of them.



### > RESEARCH HIGHLIGHTS



## Sophie **Moinas**

## Liquidity supply across multiple trading venues

Sophie Moinas tells us more about "Liquidity Supply across Multiple Trading Venues", a recent paper co-authored with Laurence Lescourret (ESSEC) for which she received the Josseph de la Vega Prize for an outstanding research paper related to the securities markets in Europe from the Federation of European Securities Exchanges (FESE).

### What are the motivations for this research project?

**Sophie Moinas.** In the last decade, the financial industry has drastically changed. Innovations and changes in regulation (such as the RegNMS\* in the U.S. or the MiFID\*\* in Europe) have fragmented the markets and given rise to a proliferation of trading venues. A reaction of the Buy Side (that is, investors, asset managers, hedge funds) has been to develop search engines like Smart Order Routing Systems, and execution algorithms to split their orders to buy or sell securities across trading platforms. A reaction of the Sell Side (that is, investment banks) has been to engage into «multi-venue market making», or, as Getco for instance uses to call itself, to become «global dealers». These institutions stand ready to buy and sell securities to provide immediacy to investors by trading against their own inventory. But in contrast to more traditional dealers, their presence is often not mandatory, and they may access multiple trading venues. Getco for instance trades NYSE-listed securities in NYSE, Arca,

LEARN MORE...

**RegNIVIS** National Market System (NMS) is a set of rules passed by the Securities and Exchange Commission (SEC), which looks to improve the U.S. exchanges through improved fairness in price execution as well as improve the displaying of quotes and amount and access to market data.

**MIFID** (the Markets in Financial Instruments Directive) is legislation for the regulation of investment services within the European Economic Area. Getmatched, BATS-Z, BATS-Y, Nasdaq, Lightpool, Deutsche Bank... But this is not purely anecdotic: recent empirical evidence shows that some «High Frequency Trading» firms nowadays act as global dealers. In our paper, we aim at understanding the quoting behaviour of these global dealers. How do they set their ask and bid prices in different platforms simultaneously? And what are the consequences of their presence for transaction costs?

#### What is your approach?

SM. The paper first looks at the impact of fragmentation with the help of an innovative model that analyses the behaviour of global dealers in a fragmented market. The primary objective of this theoretical analysis is to understand the economic forces that are at stake in global market making. How does fragmentation impact risk? Intra-market competition? Inter-market competition? The analysis shows that transaction costs, as measured by market bid-ask spreads, are significantly impacted by the divergence of dealers' global inventories, and are related to the size and the direction of order flows routed to the other venue. As a second step, we use a proprietary dataset on cross-listed stocks to empirically analyze the order submission strategies of a subset of members that we identify as global dealers. We show that these members actively manage their inventory, and that conditional on execution, they adjust their quotes in the alternative platform. As predicted by our model, we also find that quotes' aggressiveness depends on the dispersion in dealers' inventory positions.

# **KEYWORDS**Competition Securities Liquidity

- > Innovation
- > Stock Exchange

## What are the implications for public policy?

**SM.** Market fragmentation is usually seen as increasing inter-market competition (e.g. decreasing the direct transaction costs like the fees charged by the platforms), but at the expense of indirect transaction costs (e.g. decreasing market liquidity). We find that, when liquidity suppliers are active in different venues, which are the case now, they actually consolidate the markets and therefore mitigate the negative effect of competition, while increasing not only inter-market competition on fees, but also intra-market competition between dealers.



## About our researchers



#### Martí Mestieri

Martí Mestieri holds a Junior Chair position at TSE and is a member of IAST. Prior to joining TSE, he obtained a Ph.D. in economics at MIT. He is particularly interested in human capital acquisition and technology adoption. His research topics include the study of the interplay between technology diffusion and economic development, the effects of the IT revolution on wage inequality and the pattern of specialization, and the design of educational systems in the presence of private information and borrowing constraints.



Pierre Dubois is Professor of Economics at the Toulouse School of Economics of the Toulouse 1 Capitole University, a senior research fellow of the Institute of Industrial Economics (IDEI) and a Junior Member of Institut Universitaire de France. He obtained a Ph.D. from EHESS, Paris, in 1999. He is also a research fellow of CEPR and EUDN, a member of the scientific council of the University of Toulouse, an academic panelist of the UK competition commission. Pierre Dubois is also Managing Editor of International Journal of Industrial Organization, Associate Editor of Annals of Economics and Statistics and of European Economic Review. His research is broadly in empirical microeconomics, focusing on several areas of development economics and more recently in empirical IO, food demand, health and pharmaceutical.



## > RESEARCH HIGHLIGHTS



#### Sophie Moinas

Sophie Moinas is Professor of Finance at IAE Toulouse (University of Toulouse), researcher at the CRM and member of Toulouse School of Economics and IDEI. She received her doctorate from HEC in 2005. For her research, Sophie Moinas received the PhD Thesis Award from the French Finance Association and Euronext in 2006, research grants from from Europlace Institute of Finance in 2009 and 2010, and from the French National Research Agency in 2009 for a project on "Algorithmic Trading". Her recent work focuses on market fragmentation.

## How to think "green" during economic crisis?

#### **INTERVIEW WITH NICOLAS TREICH**

Nicolas Treich is research director at INRA, at Toulouse School of Economics. He was this year the scientific director of the European Association of Environmental and Resource Economists (EAERE) conference, and is a member of the chair "Finance Durable et Investissement Responsable" (FDIR). In this interview, he expresses his views over the current environment and economic growth link with a special focus on the stake of the French Government on this matter.



#### How evident is it to link environment with the economic growth?

Nicolas Treich. The link between environment and economic growth (or crisis) has been extensively studied. One line of research concerns the so-called "environmental Kuznets curve", which identified an inverted U-shape relation between pollution and per capita income. That is, environmental quality tends to deteriorate at early stages of development, but then improves at later stages. A key ingredient to explain this relationship is that environment seems to be a normal good, namely people with higher income demand more environment quality. With that respect, the current crisis may be bad news for the environment, since people have less income on average.

#### What is the stake of the politicians on this matter?

NT. Politicians often suggest that the efforts to protect the environment also offer an opportunity for economic development, and in particular for employment. For instance, members of the current government stated this summer that the ecological transition should create 1 million jobs by 2025. Unfortunately, I have not seen a sound economic analysis that can back up such political statement. My belief is instead that this ecological transition likely will not create many jobs in "net", meaning that it may indeed create "green jobs" but it may also destroy "brown jobs", and the net figure might well be negative overall. The previous government made a similar claim in 2007 that the Grenelle de l'environnement will create more than 500,000 jobs by 2020. Given the global trend of (un-)employment in France, one may wonder about whether this claim makes sense. But, let me be clear: that does not mean that we should not invest in

#### **READ MORE...**

#### C. Gollier & S.Pouget, "Asset prices and corporate behavior with socially responsible investors" TSE working paper.

Kitzmueller M. and J. Shimshack. 2012. "Economic perspectives on corporate social responsibility" Journal of Economic Literature 50, 51-84.

environmental preservation. A better environment is a big benefit for citizens. But this benefit usually comes at a cost in terms of economic development. Win-win opportunities (better environment and more growth) like those often presented by our politicians seem appealing... but unfortunately they rarely exist in the real world.

#### Did the departure of two Ministers of Ecology in a single year, put the image of the French Government at a stake?

**NT.** This suggests that the environment is a very politically sensitive topic. One simple reason is that several sectors of the economy, like the energy sector for instance, directly and strongly depend on governmental decisions (e.g., through subsidies, or the introduction of a new environmental law). As a result, it is natural to expect strong industrial lobbying, and in turn strong pressure to the politicians in power. The second departure of the Minister of Ecology was apparently related to a reduction of the budget of her Ministry. That perhaps suggests that in a difficult economic period there might be other priorities for the government than the environment. In such a period, it is indeed difficult to "afford" the cost of environmental policies, as we suggested above. To me, the key issue then is to compare this cost to the benefit generated by environmental policies. That comparison may help to select efficient policies, and may be a safeguard against political lobbying and demagogy. Unfortunately, cost-benefit comparisons of implemented environmental policies are not often produced, and not made accessible to the public. At TSE, thanks to the support of INRA and the Ministry of Ecology, we have constituted a group around Henrik Andersson,

Jim Hammitt and myself together with a handful of postdoc and PhD students specialized in computing the health benefits of environmental policies.

#### Can the government alone control the global environment concerns?

**NT.** Indeed, the preservation of the environment is traditionally seen as a "top down" approach: the firms pollute and the government regulates. This is the standard view of economics textbooks: when there is a market failure, like an environmental externality, the role of the government is to design good instruments (taxes, subsidies, permits, norms, liabilities rules etc.) to address the market failure. However, this top down approach has been increasingly criticized. A first reason is the difficulty to solve the problem because of asymmetry of information: for instance, the government cannot observe the level of pollution generated by the firms. A second reason is political economy. Because of lobbying, the government may simply not want to implement the efficient policy. A related reason is the global nature of many environmental problems, which make local governments not able to address unilaterally the environmental issue. Because of these reasons, a new "bottom up" approach has gained popularity in recent years, the so called corporate social responsibility (CSR) movement. The idea is that firms make voluntarily efforts to reduce pollution, and in doing so they please some citizens and consumers, that purchase their products and prevent from boycotting the firm for instance. This new approach shows promise, as indicated by some research developed at TSE under the chair Finance Durable et Investissement Responsible (FDIR). Nevertheless, and some of my colleagues like Stefan Ambec or Sebastien Pouget may disagree with me, I think the CSR is a frail concept. Indeed, it relies on the weak and inconsistent generosity of citizens, and on the ability to produce relevant and accessible information about the firms that truly make an effort in favor of the environment. So far, we have seen a lot of green-washing going on.

out to the society?

NT. The last topic about CSR illustrates the variety and the difficulty of the research on nvironmental issues. When one wants to think about the generosity of citizens, one naturally wants to rely on the research in psychology and sociology. Along similar lines, when one wants to better



#### How can interdisciplinary involvement help foster the policy controls and reach

understand environmental lobbying, it may be useful to interact with political scientists. As an illustration of the interdisciplinary nature of these issues, the environmental economics department at TSE has developed in the last couple of years a common research effort with the interdisciplinary Institute of Advanced Study in Toulouse (IAST). We have organized conferences (like that on "behavioral environmental economics" in 2012, on "biology and economics" or the EAERE this year) where interdisciplinary research on environmental issues was well represented.



> Nicolas Treich is research director at INRA, member



of LERNA and IDEI. His research concerns risk and decision theory, environmental economics and benefit-cost analysis. He has published several scientific papers including some on the Precautionary Principle, the value of statistical life and climate policy. He has organized several international conferences, and has written various broad audience papers and reports on risk policy issues.

## > EVENTS

## TIGER Forum 2014

Global structures in expanding economies





#### Save the date: 2-6 June 2014

After the successful launch of TIGER Forum in 2013, TSE announces the second edition. TIGER Forum 2014 will offer 6 academic conferences, as well as high-level policy roundtables, so as to attract the attention of academics, decision-makers and the media.

#### Programme overview:

The TIGER Forum 2014, besides enhanced policy events, will include scientific conferences in the following fields:

- Energy Industry at a crossroad: preparing the low carbon future
- Kuhmo Nectar annual conference of the International Transportation Economics Association (ITEA)
- · Workshop on the military in politics in the 21st century
- Workshop on health economics
- Workshop on development economics
- · Workshop on economics & religion

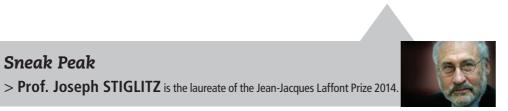
<u>Flashback</u> TIGER Forum 2013 view all videos (scientific talks, Plenary session and VIP Talks).

> Contact TSE: Marc Ivaldi

## **Follow** the progress and stay informed:

www.tiger-forum.com

@TIGERForum2014









## **EEA-ESEM TOULOUSE 2014**

### 25 - 29 August 2014

TSE will host the 29th Annual congress of the European Economic Association & the 68<sup>th</sup> European meeting of the Econometric society. This conference gathers over 1500 economists from all over the world and is a major scientific event.





13 November 2013

**Conference Recent Developments** 

in the Statistics of High

Frequency Data

TSE Video library The in house channel of TSE namely UBICAST is an excellent way to access the past scientific conferences & academic events.

http://ut-capitole.ubicast.tv/channels/#toulouse-school-of-economics

14-15 November 2013 5<sup>th</sup> French Econometrics Conference

#### **PAST EVENTS**

2-5 June 2013

20-21 June 2013 Workshop in Macroeconomics

24-25 June 2013 The 9th Toulouse Lecture in Economics

26-29 June 2013 **EAERE 2013** 

**TIGER Forum** 



#### DATES TO REMEMBER:

15 November 2013: Paper Submission Opens

Midnight GMT 15 February **2014:** Paper Submission Closes

18 April 2014: Notification of Paper Acceptance

16 May 2014: **Early Registration Deadline** 

#### Website

www.eea-esem-congresses.org > Contact TSE: Vincent Réquillart





13-14 December 2013

Recent Advances in Set Identification: Theory and Applications

## > THE BIG INTERVIEW

Gérard Mestrallet & Edouard Sauvage of GDF SUEZ talk to us about the need for EU Political leaders to act quickly on the European **Energy Policy** 



#### **GDF-SUEZ** Chairman and Chief Executive Officer

Born on 1st April 1949, he graduated from the Ecole Polytechnique (1968), the Ecole Nationale de l'Aviation Civile (ENAC) (1971) and the Ecole Nationale d'Administration (1978). After four years in a senior position at the civil service, he joined

the Suez Canal Company in 1984 and became CEO in 1995. Two years later, he became the Chairman of the Executive Board of Suez Lyonnaise des Eaux. He was appointed Chairman and CEO of SUEZ in 2001, GDF SUEZ in 2007

Apart from the GDF SUEZ Group, he has other roles & memeberships : Director of Saint-Gobain (France), Pargesa Holding SA (Switzerland) and International Power (UK). He also chairs the Association EUROPLACE Paris and is a member of the Supervisory Board of Siemens AG (since January 2013)

GDF SVez

Global energy giant GDF-SUEZ is a founding partner of the Toulouse School of Economics Foundation. The group, which was created through the 2007 merger of GDF and SUEZ, is now the leading producer of non-nuclear electricity worldwide. It has a presence in 50 countries with more than 138,000 staff, and in 2012 achieved sales of 82 billion euros, investing 7-8 billion annually.

#### public debate: what are GDF-SUEZ's responses to the challenge of reducing greenhouse gas emissions?

**Gérard Mestrallet (GM).** As a global energy company firmly anchored in France, GDF SUEZ is convinced of the need to engage in this transformation and actively seeks to contribute to the national debate on the issue. We support the idea of a two-pronged approach to the energy transition: Speeding up energy efficiency policies, focusing in priority on thermal renovation of the homes which consume the most energy. Residential and office buildings account for more than 40% of the country's energy consumption, so we have proposed a renovation passport scheme which will detect high-consumption homes and support households at every step of the refurbishment work they undertake;

Developing a balanced energy mix – the debate in France all too often focuses on electricity alone. Energy is used for a wide range of purposes – heating, transport, industrial use, etc. We need to find the right form of energy for each need. Renewable gas, i.e. biogas from waste fermentation, is a very relevant form of energy for heating or for powering vehicles. It's an environmentally and financially promising renewable energy source which is often overlooked.

This two- pronged approach focusing on energy efficiency and diversified production lies at the heart of our strategy: we promote GDF SUEZ as a true energy partner to our customers. The Group doesn't just supply their gas or electricity, it helps them manage their consumption and develop innovative solutions day to day.

**Europe Energy Commissioner Günther** Oettinger recently appealed in an interview in Les Echos for a truly European energy market, calling for legislative consistency and more connected networks. How is GDF-SUEZ preparing ganised and disconnected from actual demand in for this European energy market?

**GM:** Europe is in the early stages of a profound energy system transformation:

- with energy sector fragmentation brought on by market liberalisation and the development of competition;

- with greater decentralisation of energy production due to the renewable energy boom. Connected metering or 'smart grids' will play an important role in this model:

- due to falling energy demand as a result of the economic recession and de-industrialisation, not to mention the effect of increasingly ambitious energy saving policies.

The energy transition is at the centre of At the same time, the lack of visibility and an uncertain regulatory framework make it impossible for investors to contribute to a transformed European energy system. The electricity sector has seen a rapid drop in operating hours and a growing number of electricity plants are no longer profitable, hence the early decommissioning of some. GDF Suez has been able to react by optimising our portfolio of European assets and ramping up our development of renewables and energy efficiency services as well as by expanding in emerging countries.

It is nevertheless undeniable that this situation affects economic interest from a broader perspective. It is impossible for the status guo to continue, especially as the energy sector enjoys the potential to have a very positive influence on a European economy currently facing huge difficulties, not to mention its ability to act as a key driver of econo-

mic arowth. Aside the satisfaction of having contributed to the I therefore fully back the European Energy Comemergence of a spearhead in economic research, GDF SUEZ has been following the research carried out by missioner's call for consistent legislation. I also TSE with interest in an area of particular importance appeal for further development of coordinated and to the group: the economics of the environment and predictable national and European energy policies. natural resources. The analyses furthered by TSE rein order to pave the way for vital investments and searchers surrounding the links between economic make this European transition into a low carbon growth, the environment and energy match the economy happen. The necessary reconsolidation group's fundamental aim of making energy a source of European policy should involve the following: for progress and development. -Offer the European carbon market reliable pros-Technological progress, but also the regulatory uncerpects: European policy must set ambitious, yet tainty faced by the energy sector, combine to create

stable and realistic targets on greenhouse gas emissions beyond 2020, straight away. -Restructure the market so that it fairly remunerates all assets which contribute to security of supply: establishing return on capacity mechanisms based on European directives is essential in this respect. The system must be part of a longterm visibility effort, avoiding national initiatives which, due to lack of coordination, risk under-optimising cross-border exchanges and pushing up the cost of a secure supply. - Promote renewable energies in a more sustainable manner: the support mechanisms in place to promote renewables have always been disormember countries, which has had a damaging effect on the price paid by consumers and the competitiveness of European companies. It is es-

The fact that renowned economists are commissioned sential that renewables subsidies be geared toby financial institutions or businesses is no surprise, wards profitability and the market. t's actually reassuring that their skills are at the dis-- Continue to invest in promising technologies like posal of those who have an impact on the economy. energy storage, carbon storage and sequestration, Nevertheless, their ties with public or private institumeters and intelligent networks, shale gas and tions should be mentioned when they speak in public on a topic which may engender conflicts of interest. renewable energies. These debates testify to the need for a transparent EU political leaders must act quickly to lay down system for financing economic research. The system new guidelines for European energy policy. I would set up by TSE through the Jean-Jacques Laffont Founlike to emphasise that investments in the energy dation seems emblematic of a partnership which sector contribute not only to the supply of a safe guarantees researchers' independence. Companies and effective product, but also to job creation and contribute to research funding without having any economic revitalisation. direct say in the choice of issues probed.

## > THE BIG INTERVIEW



Édouard Sauvage, Director of Strategy

#### What were GDF SUEZ's motives in becoming involved in the creation of the TSE Foundation and what are the consequences of this partnership for GDF SUEZ?

Edouard Sauvage (ES). Jean-Jacques Laffont was a great contributor to the renewal of economics through his writings on the role of information in analysis of relationships between economic players. His personal aura and the talent he brought together in the '90s at IDEI (Institut d'Economie Industrielle) in Toulouse convinced GDF Suez of the necessity of supporting this project.

myriad possible future scenarios. Economists help reduce the uncertainty facing companies in the sector. It also enables us to identify the most effective policies to respond to phenomena like climate change, for example. Economists' voices have perhaps not yet been heard clearly enough in the corridors of political power, especially at the European level.

#### What do you think of the current debates on ethics and conflicts of interest among economists? How can economists' freedom of research be quaranteed where there are close ties with businesses?

**ES:** The current debates you refer to were sparked in the United States where economists' close ties with powerful financial institutions were vehemently criticised in the wake of the financial crisis. They spread to Europe focusing on a few economists with high profiles in the media.

## > PARTNERSHIPS

## Focus on the **Toulouse Network** for Information Technology (TNIT)

The Toulouse Network for Information Technology is funded by Microsoft & managed by Jacques Crémer, TSE Scientific Director, and Yassine Lefouili, TSE Researcher.



Microsoft

#### IN A TALK WITH YASSINE LEFOUILI

#### Why was this network created?

Yassine Lefouili: The TNIT was created in 2005 to stimulate highquality economic research on the software industry, the role and impact of the Internet, and intellectual property. The aim of the network is to encourage some of the best academic economists in the world to engage on the issues generated by the fast development of information technology. We have members from MIT, Stanford, Harvard, Chicago... The complete list of current members available online : http://idei.fr/tnit/members.html

To meet TNIT's expectation of world-class research, the members enjoy complete academic independence in their work.

#### How often do the members come together?

YL: The members participate in an annual meeting where they discuss each other's research and dialog with high-level practitioners about the evolution of the IT industry. Moreover, in the recent years, young researchers who work on IT-related issues have been invited to present their work at the TNIT annual meetings to benefit from discussions with and comments from the members of the network. The recent annual meeting was held in Redmond, Washington on October 18-19, 2013 and featured nine presentations of academics papers as well as three brainstorming sessions on the following topics: Big Data, Antitrust and Intellectual Property.

Almost 70 academic papers of their involvement in the network.

#### How about the TNIT members' research?

#### Could you give us some examples of their recent work?

YL: Almost 70 academic papers have been produced since 2005 by the TNIT members as part of their involvement in the network. Many of these papers have been published in top economics journals such as the American Economic Review, Econometrica, the Journal of Political Economy and the Quarterly Journal of Economics.

Here are two examples of very recent work by members of the network.

In "Sales Mechanisms in Online Markets: What Happened to Internet Auctions", a paper that was presented at the 2012 Annual Meeting, TNIT member Jonathan Levin and his co-authors explore the evolution of sales mechanisms in online markets. While consumers auctions were very popular in the early days of internet commerce, today online sellers mostly use posted prices. Using data from eBay, the authors argue that compositional shifts in the items being sold, or the sellers offering these items, cannot account for this evolution. They develop a model to distinguish between two hypotheses: a shift in buyer demand away from auctions, and general narrowing of seller margins that favors posted prices. They find that the former is more important. They also provide

evidence on where auctions are still used. and on why some sellers may continue to use both auctions and posted prices. In "The Nature and Incidence of Software Piracy: Evidence from Windows", a paper that will be presented at the 2013 Annual Meeting, TNIT member Susan Athey and Scott Stern use data from Microsoft Windows 7 to analyze software piracy by individual consumers; which they call "retail" piracy. They find that a large share of retail piracy occurs by using keys that are posted on Internet sites such as PirateBay, and that a small number of keys account for a large share of piracy. They then examine how piracy varies with the economic and institutional environment, showing that it responds to GDP and intellectual property protection. They also show that piracy responds to economic forces such as price and the time/bandwidth cost of downloading pirated versions. Other examples of the TNIT members' research can be found at http://idei.fr/tnit/papers.html

In particular, issues #7 and #9 of the TNIT Newsletter (available at http://idei.fr/tnit/newsletter.html) feature summaries of the papers presented at the 2011 and 2012 annual meetings respectively.

## > PARTNERSHIPS

## have been produced since 2005 by the TNIT members as a part

## **RECENT EVENT** 18-19 October 2013 TNIT annual meeting Nine presentations of academics papers as well as three brainstorming sessions on the following topics: Big Data, Antitrust and Intellectual Property. **NIT**newsletter

## > PARTNERSHIPS

## The need for multi and interdisciplinary research



The French National Centre for Scientific Research (CNRS) is a founding member of the Foundation Jean-Jacques Laffont -TSE. Patrice BOURDELAIS, Director of social sciences scientific department serves on the TSE Board of Directors. Historian and demographer, he has headed Humanities and Social Sciences at the CNRS since 2010. He is committed to European projects and has successively coordinated Erasmus Mundus Masters and Doctorate programmes on themes tied to his work on the "Dynamics of Health and Welfare."



#### INTERVIEW WITH PATRICE BOURDELAIS

#### > The role of the CNRS in the development of the Humanities and Social Sciences

The CNRS contributes to the development of the Humanities and Social Sciences (HSS) through its annual financial support for research teams and the recruitment of researchers and IT experts. A recent review of the CNRS' added value for HSS research clearly shows that the backgrounds of the researchers recruited made it possible to develop formal, quantitative and modelling-based approaches (e.g. in economics, linguistics and geography) and that the CNRS is currently investing far more than are universities in cultural fields and comparative studies, which are essential in today's globalised world. At the INSHS, our priority is to bring an international dimension to all French HSS research. To that end, we have thirty units abroad which offer researchers the opportunity to live in close contact with their fields, we provide funding for medium-term (4-9 month) travel, and support major journals' efforts to publish English editions online. Our second priority is supporting multiand interdisciplinary research on topics where the HSS can go beyond a technical approach to provide a fresh perspective, including energy, sustainable development, augmented humanity and big data. Our third priority is promoting the development of the «Digital Humanities,» which are leading to a sea-change in how researchers work (the CNRS is leading two very large research infrastructure projects: Huma-Num and Progedo). Last but not least, at the INSHS we encourage the creation of research networks on emerging issues and new fields (GDR [Research Groups] and GIS [Scientific Interest Groups]). We also organise and provide support for HSS documentation in France (support for journals, ongoing training for documentalists and editors, etc.).

#### > The CNRS and the fight to keep the HSS on the 2020 Framework Proaramme

Throughout the preparatory meetings on the FP8, the French Ministry for Research and the CNRS highlighted the importance of maintaining a dedicated HSS programme. Unfortunately, their efforts met with very limited success, and fundamental research in the HSS will receive very little funding, as if it failed to provide even an indirect response to the current economic crisis. The HSS will, however, have to be involved in all of the projects aimed at other issues. These programmes should thus strengthen multiand interdisciplinary research. The collective failure of the HSS at the European level because that is, in fact, what this represents - should encourage us to consider why these disciplines lack credibility for our politicians and leaders. We know that over the past few years, the situation has changed in the corporate world, where the HSS have proven that they can provide added value through relevant analyses and problem solving, but Brussels seems oblivious to the changes in research practices and the issues addressed. We are also responsible for changing a situation which has serious consequences for research in the HSS.

The gap between researchers' and professors' salaries in France issue in economics.

policy

- to France.

## > PARTNERSHIPS

# and abroad is a particularly pressing

#### > The CNRS' reverse brain drain

The CNRS has opened a number of permanent positions in different engineering fields, biology and physics, which made it possible to recruit young French postdocs who had spent time abroad in addition to foreign researchers. In recent years, one-third of all CNRS recruitments, including in the HSS, have been foreign researchers, proof that our laboratories remain attractive, even for researchers from the rest of Europe. Funded chairs offer excellent working conditions, as did the opportunity to offer permanent contracts in certain exceptional cases. The gap between researchers' and professors' salaries in France and abroad is a particularly pressing issue in economics. The RTRA and the foundations created five years ago form a framework which has made it possible to develop viable solutions. As part of its new site-based policy, the CNRS can also work with local partners to support new staff arriving in France by forming a team of IT and BIATTS (library, engineering, administrative, technical, social and healthcare) staff. I'd also like to note that in addition to looking at net salaries, our staff also looks at healthcare costs and quality and the availability of free education from preschool through secondary school, which mean that fortunately for us, depending on where they are in their lives and how many children they have, they may actually find it guite easy to move – or return

#### **READ MORE...**

#### **RECENT BOOKS**

"Vulnerability, Social Inequality and Health" Eds. Patrice Bourdelais and John Chircop, editions Colibri CIDEHUS-UE. Lisboa, March 2010.

"The price of Life. Welfare Systems, Social Nets and Economic Growth" CIDEHUS, Lisbon, 2008 (Ed. with Laurinda Abreu).

"Dynamics of Health and Welfare: texts and contexts" Ed. Colibri, Lisbonne, 2007, (with Laurinda Abreu, Teresa Ortiz-Gomez, Guillermo Palacios)

#### **RECENT BOOKS CHAPTERS**

"Protéger, éduquer, discipliner **la population**" in Aux origines de la Médecine, sld Didier Sicard et Georges Vigarello, Fayard, 2011, pp. 186-201.

"Histoire de la Santé Publique" in Santé Publique l'état des savoirs, sld Didier Fassin et Boris Hauray, éditions la découverte, Paris, 2010, pp 13-21.

#### "Utopia as Future: Economic and Political Development and

Health" in History of the Social Determinants of Health. Global histories. contemporary Debates, ed s. Harold J. Cook, Sanjoy Bhattacharya, Anne Hardy, Orient BlackSwan, 2009, 213-227.

## > ÉCOLE TSE

## Companies: How to stay in contact with the school?

The school is putting in a lot of energy and is providing more means to develop relationships with companies that are essential to facilitate the training and integration of its students. We are convinced that these initiatives will not only have a positive impact but also a long lasting reputation amongst our partners. The reputation of the School continues to rise, both upstream and downstream. "Upstream of the School": an increase in the number and level of university and "preparatory classes" students. "Downstream of the school": more connections between the school and the business community. There are various channels through which the companies can stay in contact with the school: the ever growing Alumni network, the "Cercle du Bazacle" and the business talks, a recent initiative of the school to enable the students to interact with the professionals. The development of these connections proves to be beneficial to students, who in turn become the best ambassadors of the school in enterprises. Statistics show that a variety of sectors are represented in the student internships: industry (eg Airbus), services, banks, economic consulting firms, international institutions, regulators...



## A new Business & International **Relations Manager**

In constant efforts to further improve the visibility of the school in the professional world, we have recruited a new Business & International Relations Manager - Lorna BRIOT.

## NetworkingDay CORPORATE | TSE ALUMNI FORUM

#### Join the network of supporting companies and institutions as well as the partners of the School!

We look forward to welcoming you at the Business Networking Day or to have you address our students. You could also support the various actions of the school by allocating the apprenticeship tax.

#### Friday, 29<sup>th</sup> November 2013



## Ph.D. at TSE

While 80% of the placements are academic in leading European and international universities there are other sectors where the students get oriented towards :

- Research division of Central Banks
- Consultants in international networks
- Managers in European and international organizations
- Within the top French enterprises
- Ministries...

For the academic year 2013-2014, TSE Doctoral School enters its final phase of transition following the reform that was introduced two years ago. This new mode of progressive organization aims to provide a uniform curriculum to the students having chosen the "research" path within Toulouse School of Economics.

Courses emphasize finding the right balance between diversification, getting a good general economics culture, and the specialization needed for effective research.

To know more about the program and the reform: 1ttp://www.ecole.tse-fr.eu/en/programs/doctoral-program

## **Executive Education**

The winners awarded during the EFMD's Executive Development Conference in Stockholm, Sweden 9-11 October



EDF & TSE delegation

Executive Education bags the prestigious EFMD "Excellence In Practice" award under the category **Organization Development** for their outstanding learning & development programme "Corporate Turnaround: Focusing, Aligning and Building for Success"

## > ÉCOLE TSE

#### RECENT **BUSINESS TALKS**

#### **3 October 2013**

Benoît Cœuré, member of the **Board of the European Central Bank** on "New rules for monetary policy : is the central bank still a lender of last resort?".

#### 17 October 2013

Anne Perrot, partner at MAPP on "Competition Policy."

#### 22 October 2013

Arun Kumar Singh, Indian Ambassador to France on "Indian Economy and Business opportunities in India."

#### EDF-TSE

The students community of TSE is very active in various levels-from organizing events to creating journals...

#### Follow them on



Ecole d'économie de Toulouse - TSE

BDE TSE: Bureau Des Étudiants Tse

**TSEconomist:** www.tseconomist.com

## > NEWS FLASH

## Joining us this academic year

They have come from Oxford, Princeton, Cambridge, Paris Dauphine, New York and elsewhere to further enrich the reputation of TSE & IAST.





> Paris Dauphine



> Princeton University



Sean BOTTOMLEY > Cambridge University



Christine GRÜN

> University of Bonn

Robert ULBRICHT

Patrick LE BIHAN > New York University





Andrew RHODES

> University of Oxford

César MANTILLA > Universidad de los Andes





> University of Rochester





IAST VISITING PROFESSOR

Hillard KAPLAN > University of New Mexico





Jean Tirole is admitted as the Honorary Fellow of the Royal Society of Edinburgh. RSE announced this year 47 UK and International fellows elected following a rigorous examination of their achievements in their relevant fields. Honorary Fellows persons of truly exceptional distinction who have rendered outstanding service which is recognised by peer groups as original and inspirational and which demonstrates a sustained commitment. THEROYAL The maximum number of Honorary SOCIETY Fellows who may be elected in any one year by RSE is restricted to four.

Jean Tirole, receives two "Doctor Honoris causa" in May 2013 :

- > from the University
- of Hitotsubashi (Tokyo), Susumu Yamauchi.
- > from HEC Lausanne.

## New research grants





**Thomas Chaney** 

"FiNet : Firm Networks, Trade and Growth".

#### Patrick Rev

"Cooperation and competition in vertical relations: the business strategies and industry oversight of supply agreements and buying patterns"



Martí Mestieri "GRATE : Croissance, Adoption de Technologies et Commerce" (ANR Jeunes Chercheurs).

**Patrick Fève & Franck Portier** "AMF Analyse des Multiplicateurs Fiscaux" (ANR Programme Blanc).

#### Jean-Pierre Florens

"IPANEMA : Problèmes inverses et parcimonie pour la modélisation économétrique et applications" (ANR Programme Blanc – multi-partenariat).

## Prize and awards

#### Spaengler IQAM Prize

Augustin Landier and his co-authors J. Sauvagnat, D. Sraer, D. Thesmar have been selected by the Review of Finance as the winners of the Spaengler IQAM Prize at EFA 2013 for the best paper in the last year's issues for "Bottom-Up Corporate Governance".



## > NEWS FLASH



### Scientific Council of TSE

#### New chairman



During its last meeting, Torsten Persson has been elected President of the Scientific Council of TSE. He succeeds to Richard Blundell and joins the Scientific Committee which has 16 members, now including four Nobel Laureates in Economics: Amartya Sen, Roger B.Myerson, Eric S.Maskin and Thomas J.Sargent who was awarded the Nobel Prize in 2011.

### French Council of Economic Analysis (CAE)

Guillaume Plantin, Jean Tirole and David Thesmar (HEC) members of the French Council of Economic Analysis (CAE) have published a new public report on "Reforming French Bankruptcy Law".

O conseil d'analyse economique	Reflaces Plants, Decid Databart and Jone Trefs.
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Les notes du conseil d'analyse économique, es causieu	
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#### **THE AUTHOR**

Toulouse

School

of Economics

Augustin Landier is a Professor at the Toulouse School

of Economics since 2009. Prior to that, he taught finance at the University of Chicago, New York University and was a resident scholar at the IMF. He holds a PhD in Economics from the Massachusetts Institute of Technology (2002) and graduated from ENS Paris (1998). From 2009 to 2012, he was a member of Conseil d'Analyse Economique. His research interests are mostly in corporate finance, banking, economics of organizations, behavioral finance. Augustin contributes frequently to the public debate in France, notably through regular opeds in the French newspapers (Les Echos) and the publication of books aimed at a larger audience. He published with David Thesmar "Le Grand Méchant Marché" (Flammarion, 2007) and La Société Translucide (Fayard, 2010), which was awarded with the Prix Turgot.

## Augustin Landier New book

#### 10 idées qui coulent la France by AUGUSTIN LANDIER of TSE coauthored with DAVID THESMAR of HEC

In this book the authors look at 10 specific economic fallacies which can be regrouped in three major families.

> Many government interventions and public subsidies are based on the belief that "reindustrialization" is the only way to avoid economic decline. They show that there is no reason to be afraid of the transition from an industry economy into a services economy, a transition that France has been going through.

> It is particularly toxic to assume that the incentives and informational frictions that make the functioning of private markets imperfect would suddenly cease to exist if decisions are taken by governmental agents: There is no such thing in reality as a benevolent planner. So naïve **Colbertism** leads to cronyism, arbitrary decisions, and a form of "subsidies capitalism" where a major determinant of a company's success is its ability to attract public subsidies. This is not a particularly promising way out of our economic slowdown

> Last, the authors are highly skeptical about the view that "World Governance" or "European Federalism" are realistic ways to get the French economy back on track: paradoxically politicians often invoke religiously Europe or World Governance (e.g. the G20) as ways to put order in economic

chaos; this is a very important dimension of their rhetoric and beliefs system. But at the same time refuse to take seriously the advice of supra-national bodies such as IMF, the European commission, which give precise recommendations about the type of structural reforms that France should undertake; and they often attack the policies of the ECB.

> AUGUSTIN LANDIER DAVID THESMAR

10 IDÉES QUI **COULENT** LA FRANCE

Flammarion



#### ABOUT **CHRISTOPHE** BONTEMPS

> Ph.D. in applied mathematics, Christophe is an engineer at INRA and a member of the research group Food, Farms & Firms at TSE.

Website www.standupeconomist.com

> Access the Yoram Bauman show at TSE



## Yoram Bauman Economics from the point of view of a stand-up economist

Yoram Bauman, Ph.D. in economics from University of Washington is the world's 1st & only stand-up economist. Co-author of two volumes of the Cartoon Introduction to Economics, he has appeared in the TIME Magazine and Public Broadcasting Service (PBS). He has already shared the stage with Robin Williams & Paul Krugman to name a few & performs internationally on regular basis. TSE' association with Yoram is directly linked to his friendship with Christophe Bontemps, engineer at the TSE-INRA lab, who has translated his book in French. TSE has had the privilege to host the Yoram Bauman show twice.

#### Christophe's impression about Yoram and his book...

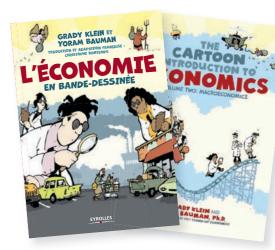
When Yoram told me "find an editor and translate it, that would be really cool, France is the home of comics," I thought he was joking. I wouldn't have thought seriously of translating an economic cartoon, but Yoram and the cartoonist Grady Klein were keen on doing a French version. Their enthusiasm proved convincing!

Above all, I really liked the original version and the incredible talent of Yoram in his shows. After signing with the editor (Evrolles), I was daunted: translating is not easy, especially when it is a cartoon with at least one economic concept per page, jokes, onomatopoeia and pirates!

I finally met Yoram in London and it is around sashimis and a glass of sake, that we really hit it off and considered a show at TSE. He is a

Yoram Bauman... My goal in life is to spread joy to the world through economics comedy; to reform economics education; & to implement carbon pricing. I had a good time at both TSE presentations. I remember reciting a sad but true joke about how climate change economists spend a lot of time flying around the world telling people that we need to spend less time flying around the world. The city of Toulouse is lovely, with a special thought to the local food! Coming from Seattle – the home to the Boeing manufacturing, there is a little bit competition there with Toulouse - home to Airbus!





remarkable person, an economist at 200%, engaged for the environment. It was great getting to know him.