Jean-Jacques Laffont Prize Winner
Robert M Townsend

The Financial Crisis 2007-08

French Presidential Elections

Fuel Costs in Airline Industry

The Equity Premium Puzzle

History & Economics

15 Rules for a Good Presentation

Also Includes
Conference List
Word from the BDE

Introductory Issue - May 2012
Introduction to TSEconomist

A Toulouse School of Economics Student Magazine - by us, for us.

A successful economic institute is characterized by its ability to substantially contribute to research of a high quality and at the same time actively participate in social developments. Obviously, the interaction among its members, faculty, administration and students plays an important role for such a goal to be realized.

The TSEconomist, the Toulouse School of Economics (TSE) students’ magazine is an initiative of the students which has as a primary goal to provide a constant platform of repeated and rewarding interaction among TSE students, university professors and highly qualified researchers. Researchers are invited to submit their opinions about current economic issues. In this way, students are motivated to develop a critical way of thinking about these issues and get in touch with recent research developments in various economic areas. Moreover, students are invited to express their own economic ideas and summarize their research activities.

As the faculty members in TSE and their areas of specialization are numerous, the articles written by them can help students identify the research field in which they would want to specialize and contact the appropriate faculty members to discuss their ideas. At the same time, students can have the opportunity to review the ideas of top level researchers that visit TSE through their interviews in the magazine. In such interviews, researchers can answer students’ questions about current economic issues and future trends in economic research.

Furthermore, the magazine wishes to cover the numerous academic events organized by TSE such as conferences, workshops and important seminars. By advertising them and summarizing their main conclusions, TSE members can be better informed about the schedule and content of such events.

A second goal of this magazine is to develop a further link between the TSE student community and the job market. The magazine provides space for different visiting companies to present the job profiles on offer as well to highlight the qualifications required to be considered as a potential employee. This can provide students with useful information about the available jobs and increase their chances to be accepted in the various companies presented in different issues of the magazine.

Last but not the least, the students’ magazine aims is to expand the TSE network by contributing to the development of solid bonds with its alumni. Former students of TSE with their various achievements can guide current students, provide them with more opportunities and important lessons for the future.

We feel the necessity to mention that we are highly indebted to Jean-Jacques Laffont Foundation for its substantial support. We wish to thank the Managing Director of TSE, Cristian Gollier, the director of IDEI, Hervé Ossard, the director of operations and HR of TSE, Joel Echevarria and the scientific communications manager, Jennifer Stephenson for their great level of enthusiasm and their active involvement in this initiative. The freedom they provided us in designing the magazine is highly appreciated. We would like also to thank the student organization BDE-TSE for their very continuous endorsement and our sponsor, the LCL for accepting so kindly to print our magazine.

The success of this initiative highly depends on the active participation and interest of all the members of our academic community. We hope that you will enjoy reading this issue. You are very welcome to contact us and inform us about your thoughts, comments, remarks and corrections at: tseconomist@tse-fr.eu Feel free to propose topics and ideas that can be incorporated in the next edition. The TSEconomist is a magazine which is “by the students, of the students and for the students”? We hope to hear from you soon!
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The diversity of the TSE community makes its strength. At TSE, each member has the academic freedom to express his science-based opinion. The creation of TSEconomist is perfectly in line with this objective, and I am extremely glad to support this publication. I would like to make it clear that the TSE executive has no intention of exercising any censorship on the writings of its members, in TSEconomist or elsewhere. These writings remain the strict responsibility of their authors and in no way represent the opinions of TSE and its members; TSE takes no institutional policy positions and holds no institutional views.

CHRISTIAN GOLLIER, MANAGING DIRECTOR, TSE.

It is a great pleasure for me to participate to the first issue of the TSE students' magazine, TSEconomist. I first want to congratulate you for this new initiative. Creating a link between students, alumni and faculty members is very important. TSEconomist is also a great opportunity for students to develop their ideas, participate to the debates on current economic issues. The TSE students enjoy a unique interaction with research and professional networks. They need also to participate in social activities and networks. I am sure that this magazine will help them to realize this goal and I wish you a big success.

MARIE-FRANÇOISE CALMETTE, SCHOOL DIRECTOR, TSE
This journal is an excellent initiative to bring interesting contributions from members of our research community together with information about students activities and news from alumni. Given the increasing size of the TSE community, such a journal would prove to be a perfect internal information tool as well as a potential way to inform anyone interested by TSE in particular and economics in general. Let me also note that I particularly like the back cover: at last there is now a place on my desk where to put down my coffee without much damage. To sum up, I wish the best for this new journal.

**PHILIPPE BONTEMS, DIRECTOR OF GREMAQ**

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I often feel awkward when I have to write a message as a director; and I am always defiant when I read one. It might be because Beaumarchais' famous sentence "Sans la liberté de blâmer, il n'est pas d'éloge flatteur" was proudly quoted (and still is) on the front page of my father's favorite newspaper. This directors' page harms your credibility!

I read this issue of the TSEconomist with much pleasure; I hope the magazine will be a great collective success. Let the TSEconomist live a long life - its own life!

**FRANÇOIS SALANIÉ, DIRECTOR OF LERNA**

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The DEEQA is a pivotal year for PhD students, where specialized and advanced courses, research seminars, workshops and own independent research provide a full, busy and exciting menu. I'm glad to see students having every year more initiatives and ideas (like this new journal) to improve our academic life and interactions between students and faculty.

My role for the DEEQA and ENTER network is enriching and facilitated by students coordinators of ENTER and by Aude Schloesing without whom no DEEQA director would be able to find time for his own research. DEEQA evolves every year, so do not hesitate to stop at my office for suggestions.

**PIERRE DUBOIS, DIRECTOR OF DEEQA**
15 rules for good (or at least decent) presentations
— Jacques Crémer

A) Work on your presentations!

Writing and presenting are fundamental parts of the job of an academic: if you want to be paid conducting research, it will help if this research is helpful to someone! My bet would be that more people will listen to your seminars than read your papers. So work on it.

B) You are speaking to people.

Remember, you are going into a room where there are live real people waiting to listen to you. Do not go in thinking “I am doing a presentation” in the abstract; go in thinking “I am speaking to this group of people, and they are important” as a consequence
• Do not bore them.
• Look at them (and not at the screen).

C) Move.

You should be the center of attention: take control of the room. One way to do this is to be active:
• Move.
• Keep your hands out of your pockets.
• Do not turn your back to the audience to look at the screen.

D) Stop before your time is up.

The time of your audience does not belong to you. It belongs to them. If they asked you to speak for 37min, do not speak for 38min.

E) Prepare for 2/3 of the time you have

Most of us underestimate the time it takes to deliver the material we have prepared. It is important to present your most important stuff at a relaxed pace. One way to do this is to force yourself to prepare for 24 minutes when your talk is supposed to last 36.

F) …and have extra material ready

You will never be courageous enough to really follow my recommendation E (I am not!). So prepare extra material which you will add in case you have time. This will help you relax as you will not fear finishing too early (which you will never do: you are just preparing for out of equilibrium events).

Jacques Crémer obtained his PhD (in economics) at MIT in 1977.

He is now a full professor at TSE. He is a research director of CNRS and GREMAQ.

His fields of interest are industrial organization, information economics, mechanism design and contract theory.

He is the recipient of numerous professional awards. In the academic year 1988-1989, he received the “Excellence in Teaching Award”, from Virginia Tech Economics Club.
G) Do not use a laser pointer.

Very few people use laser pointer well. They encourage passivity (you turn your back to the audience and read the slides) and make me seasick.

H) Make your introduction short.

Just think about it: how often has a speaker put you to sleep with an introduction which lasted too long?

I) No literature review, especially not at the beginning of the talk.

Except if your paper is an extension of previous work which you need to present, cut the literature review. It is boring and even worse at the beginning of the talk when you are comparing your paper, which people do not know yet, to papers that they have never read. Just point out as you go along in which ways your paper extends known results.

J) Do not put too much on your slides.

![This is bad](image1)

We will call:
- \( N \) the set of agents;
- \( A_i \) the set of types of agent \( i \in N \);
- \( A \) the set of states of nature;
- \( p(\alpha) \) for \( \alpha \in A \) the probability of state of nature \( \alpha \), and, by abuse of notation, \( p(\alpha_i \mid \alpha_i) \) the probability of \( \alpha_i \in A_i \) given \( \alpha_i \);
- \( \ldots \) then, we have

\[
\sum_{\alpha_i} p(\alpha_i \mid \alpha_i) u_i(s(\alpha_i, \alpha_i); \alpha_i) \geq \sum_{\alpha_i} p(\alpha_i \mid \alpha_i) u_i
\]

With the good slide, you can explain the meaning of the symbols as you are discussing the equation.

K) Your slides are not your speaking notes!

One reason people put too much on their slides is because they want to remember what to say. But the slides are for the audience, the speaking notes for you!

L) If you want to present an outline, make it helpful.

Please do not tell me “I have just finished the introduction. I will now present the model. Then the main results. Then some extensions. And I will conclude”. If you want to present an outline, make it something that will help the audience remember the story behind your presentation.

M) If you show a figure, explain it.

And take all the time you need so that the audience understands it. This should be obvious, but it implies that you need to plan the time for it.

N) Show simplified tables of your regression results.

I really do not need to see 100 coefficients to five digits after the decimal point when you will only comment on two of them.

O) Have fun!

I am not saying this because I want you to have a nice life: your presentation will not be good if you do not enjoy giving it.
INTERVIEW WITH PROF. PATRICK BOLTON:
Questions about the recent financial crisis and the global financial world

Patrick Bolton received his PhD from London School of Economics in 1986. He is now a full professor of economics at Columbia University and visiting professor at TSE. The fields of his specialization are contract theory, corporate finance, competition policy and industrial organization. In 2005, he published his first book, “Contract Theory” (with Mathias Dewatripont). He also has co-edited two books “Credit Markets for the Poor” (with Howard Rosenthal) and “The Economics of Contracts”.

The part of the DEEQA course “Financial Markets” taught by Patrick Bolton and Guillaume Plantin focused on the explanation of the main features of the recent financial crisis. The instructors of the course were so kind to accept the request of the students-participants of the course to answer some relevant (with the content of the course) questions. The questions were prepared by the DEEQA students who attended this course.

1) What do you think about the financial transactions tax being pushed forward in France?

The average holding period of stocks has gone from over eight years in the 1960s to only several months in 2011. This trend is one simple reflection of the greater short term orientation of financial markets and institutional investors, whose ownership share has steadily increased over the past half century. Another reflection of the greater short-termism of stock markets is the growing popularity of momentum strategies, which only seek to make short-term gains by predicting swings in market sentiment, without much understanding of the underlying long-term fundamental value of stocks. The financial transactions tax can help counteract this trend. It is a small incentive to buy-and-hold and a disincentive to churning. It is also a penalty on high-frequency trading, a recent development which far from providing better liquidity is a form of cream-skimming through effective front-running by the high-frequency traders. So these are likely plusses from the introduction of the tax.

A lot depends on how it is implemented and enforced and how many countries introduce it. Sweden introduced such a tax a few years ago and had to abandon it because one major effect of the tax was to induce migration of trades outside Sweden. The same risk exists if only France (and a couple of other countries) introduce it. On the other hand, if France is able to implement the tax in a fairly streamlined way with low

**Momentum Strategies:** An investment strategy that aims to capitalize on the continuance of existing trends in the market. The momentum investor believes that large increases in the price of a security will be followed by additional gains and vice versa for declining values.

**High frequency trading:** A program trading platform that uses powerful computers to transact a large number of orders at very fast speeds. High-frequency trading uses complex algorithms to analyze multiple markets and execute orders based on market conditions. Typically, the traders with the fastest execution speeds will be more profitable than traders with slower execution speeds. As of 2009, it is estimated more than 50% of exchange volume comes from high-frequency trading orders.
transactions costs and relatively simple enforcement it may well be able to get other countries to join the bandwagon. But, resistance by the financial industry is to be expected, as the financial industry to a large extent lives off trading fees, and to the extent that the tax reduces trading the financial industry’s bottom line is directly affected.

2) Do you think that the change in the model of rating agencies that has occurred during the 70’s from "investor pays" to "issuer pays" should change? Do you think that those rating agencies under the current legal framework they operate add any social or economic value?

It will be difficult to move away from the current “issuer pays” model, because how do you get investors to pay? Rating agencies are now more like auditing/accounting firms, which by the way are also remunerated on an “issuer pays” model. Interestingly, regulation of auditing firms post Sarbanes-Oxley (2002) has taken the form of, i) a requirement of rotation of auditors, and ii) the creation of an agency, the Public Company Accounting Oversight Board (PCAOB), which supervises auditing methodologies and standards. This is in many ways still too much of a “light touch” regulation, which has not sufficiently disciplined auditing firms (witness repo 105), but interestingly this regulatory framework for auditing firms is still stronger than the current regulations in place for rating agencies. Just as with auditing firms, competition between ratings agencies is likely to be welfare reducing because competition for market share magnifies the conflicts of interest ratings agencies face and the scope for ratings shopping by the issuer. Some form of mandated assignment of a ratings firm to an issuer could well be welfare improving, but unfortunately we are a long way from seeing such regulations discussed. As for the social and economic value of ratings firms, that seems relatively straightforward.

Providing well informed and expert ratings (or more generally monitoring) is a public good and as such one would like to disseminate this information as widely as possible and economize on unnecessary duplication of monitoring costs. Because of “model risk”, however, some diversity in ratings opinions and methodologies is desirable, so that what is likely to be welfare efficient is multiple ratings on any given issue provided by a subset of raters selected from a relatively large and diverse set of possible ratings firms. The current oligopoly structure with three main ratings firms is a long way from capturing this ideal market structure of the ratings industry.

3) In class you gave a description of past bubbles that affected national economies all over the world. One common characteristic of such bubbles is the move of capital from one place to another (example: DotCom bubble in 2000, sub-prime bubble in 2007 and so on) when the burst starts. Do you think that the inability of regulators to control ex ante inflow of capital is the reason for an inevitable bubble?

That’s probably too strong. Still, you have a point here and the historical data supports your hypothesis that greater capital mobility facilitates the emergence and migration of bubbles (recall the chart from Reinhart and Rogoff, 2009). As a matter of theory it is also true that the emergence of a bubble in one asset class requires movement of capital away from other asset classes to feed the bubble. Thus, “excess capital” in some asset markets (or a ‘savings glut’) is an important condition that facilitates the emergence of bubbles.

4) There is a lot of discussion about the conflict of interest of some economists that provide their services to some private financial institutions and at the same time (or afterwards) act as regulators of these institutions. Do you think that such activities are in conflict with each other? How can we deal effectively with this problem? Should it be possible for a CEO of a big investment bank and become later a regulator? In general, what should be the role of an economist (as a researcher and policy advisor) during an economic crisis?

The medical sciences have long understood that researchers who are paid by pharmaceutical companies may be conflicted in the type of research they publish and the recommendations they make. A similar conflict can exist among economists. Another form of conflict that some economists are subject to is the kind of research they choose to engage in when they face the risk that the research may be in contradiction with...
consulting work they are doing as expert witnesses. The typical way of dealing with such conflicts is to disclose them, so that the readers can be aware of the possible conflict and can draw their own conclusions about the research and the recommendations. Disclosure may not always be sufficient. This is why there are also regulations restricting revolving door movements such as a regulator leaving the regulatory agency to work for a regulated entity. These regulations often are not strict enough. But also, as we saw in class, regulatory capture does not just take the form of the regulated entity ‘bribing’ the regulator. It often takes the form of the political supervisor of the regulatory agency (e.g., a congressional committee member in the US) being ‘influenced’ by the regulated entities’ special interests through campaign contributions, etc. If the (politician) supervisor is already captured it is very hard for the regulator to assert its regulatory power against the interests of the regulated entities. Finally, as for economists, the difficulty is that if they want to gain the expertise so that their advice about regulations is well informed and pertinent they often need access to the regulated industries and to their information. In the process of gaining this knowledge (which often comes with some form of employment or consulting activities) there is always the risk that they will be captured and will become advocates for the industry rather than impartial experts. That is just very difficult to avoid. One way of limiting this risk is to encourage a wide debate among economists, exerts and non-experts alike, who have a shared culture of professional excellence and ethical standards.

5) Do you think that this financial crisis (2007-2008) should modify the way that economics is taught?

Yes, absolutely. For one thing, a course on financial crises ought to be required along with more classical courses such as micro, macro, finance, industrial organization, etc. As a profession we have also gone too far in the direction of increased specialization and increased emphasis on methodology. In the process we have lost sight of the content. If you are trained in the neo-classical economics approach, which is now standard in most graduate programs, and have no special knowledge about how economies, markets, and financial institutions work in practice, then the occurrence of crises must come as a shock or a ‘puzzle’, for what gets emphasized in this training is the allocative efficiency of markets, the first and second welfare theorems, the constrained efficiency of market economies operating under asymmetric information, etc. All these concepts that make no room for crises; so, when financial crises occur, which give rise to huge inefficiencies and huge misallocation of resources that has to come as a major puzzle.

6) There is no doubt that nowadays, the Eurozone faces the biggest challenge of its relatively short life, a challenge that threatens even its existence. What do you think about the decision of Europeans to approve a second multi-billion aid-package to Greece and the activation of the PSI (Private Sector Involvement) program? Why do you think that the first aid package failed? Are you more optimistic about this second package that is complemented with the PSI agreement between Greece and its debt-holders?

The first ‘aid package’ should have already had a major PSI component. The cost of the crisis for Greece would then have been much less severe. The second aid-package contains a very large PSI component. We now know that this could have been done from the beginning. The problem for Greece now is that it is still saddled with massive amounts of (largely multilateral or official) debt, and there is a significant chance that it won’t be able to pay it all back. There is therefore still a huge inefficiency in place in the form of a huge debt overhang. This is going to act as a major tax on investment and growth for Greece. Having said all this, I am much more optimistic now than four months ago. I think that Europe and Greece have turned an important corner with this second rescue package. Financial markets pressure will be substantially reduced now that most of Greece’s debt is owed to other European governments. In sum, the risk of another major financial crisis has receded, but the risk of a ‘lost decade or two’ à la Japan has significantly increased.

7) As recent history has shown, a country that is in financial trouble and faces the risk of defaulting on its debt receives some foreign aid but only under strict terms that among the others require the imposition of severe austerity measures. Is this a proper reaction? Among those policies that target to the short term fiscal balance through austerity measures and those that target the long term economic growth and relax to some extend the short term budget balance requirements, would not have been better to prefer the second ones? Do you think that in practice (e.g. aid packages of IMF) this is the case?
This may not be the best way of framing the issue. It is correct that imposing severe austerity programs as a way of restoring budget balance may be counterproductive in a recession. The debt may go down in absolute value, but the country’s ability to grow and thus service the remaining debt may also go down. However, doing the opposite, launching a massive stimulus program in the hope of kick-starting growth and later repay the growing debt may also not be sustainable. GDP may grow, but the debt may grow even faster. So, what to do? My belief is that debt restructuring/forgiveness is often the best way to go, but unfortunately it is never an option that is seriously discussed by macroeconomists, the IMF, and policy makers. Take the example of corporations: when they are in financial distress they file for bankruptcy, write down their debts to a more sustainable level and then get back on their feet. The same option should be open to countries. A bankruptcy regime for over-indebted countries would be a major efficiency improvement.

8) There has been a lot of discussion about credit default swaps and the way they are traded. Do you think that they played a crucial role in the recent crisis? Should the sell of such financial products be restricted only to the holders of assets for which they are designed in order to avoid speculation attacks?

What plaid a crucial role is the counterparty risk that AIG exposed the whole financial system to by writing far too many CDS contracts than its balance sheet could sustain. The ability to insure against default through CDS contracts can be an efficiency-improving innovation, but the CDS market has to be put on much firmer foundations to limit a repeat of AIG and some of the monoline insurers. As for ‘naked’ CDS, see Bolton and Oehmke (2011) for an argument that suggests that if anything the problem is non-naked CDS not naked CDS. The possible problems with ‘naked’ CDS have been exaggerated in my view. There is nothing wrong in principle in taking a ‘naked’ CDS position as a hedge, if this can be an effective hedge against certain risks. One concern that has been voiced is the possibility that CDS could be part of a manipulation strategy, which consists in going long CDS and short the company’s stock. There was some evidence of such manipulation at the height of the crisis against Morgan Stanley.

9) How do you think that the "Volcker rule" section of the Dodd-Frank Act will affect excessive risk taking from banks? Is it a sufficient measure?

The Volcker rule seeks to prevent banks from engaging in proprietary trading, which is perceived to be very risky. By now the rule has grown to a 530 page book of detailed rules (see http://www.sec.gov/rules/proposed/2011/34-65545.pdf) which are up for public comment. We have not yet had a chance to study the rules, but the length of the document already points to the likely complexity of the rule. One basic problem for the rule is that regulators must be able to distinguish between trades that are for the bank’s own benefit (a proprietary trade) and other trades that are for their clients’ benefit. One can easily imagine how difficult it will be to enforce this rule in practice. Proprietary trading can be a complement to banks’ market-making activities. To the extent that regulatory frictions resulting from the ban on proprietary trading make market-making more difficult one can anticipate greater trading costs and loss of liquidity resulting from the implementation of the Volcker rule. Also, market-making will migrate to entities that are not regulated (e.g. hedge funds). Thus, while risks from proprietary trading will be reduced in the regulated sector they will increase in the unregulated sector, with less transparency about the possible build-up of risks in the unregulated sector. We could thus simply end up where we were before the crisis of 2007-2008, with a risky unregulated sector that exposes the regulated sector to contagion risk.
Imagine that you were a little child receiving $100 from your grandmother in 1946. Suppose also, that you were a wanna-be economist who tried to do the best long-run investment decision at the very early stage of your life. At that time, say, you had two options: you could have invested in safe risk-less government bond, or in a riskier stock market. What was the best option? What would you have done?

If you had invested the $100 in government bonds, it would have become (adjusting for inflation) $153 in 65 years down the line. Instead, if you had kept your money in stocks, it would have become $6473. In other words, historically, investing in stocks gave a 8.2% average annual return, whereas the government bonds only a 0.7% average annual return.

The difference in returns between a safe asset and a risky asset can easily be explained with the following argument: given their risky nature, stocks are able to attract investors only if they are compensated with a risk-premium, which is an additional price that investors ask for bearing the risk of holding unsafe assets. In fact, if the returns of government bonds and stocks were the same, no investor would hold stocks. However, it is very important to clarify what "risky" means.

It is not possible to predict the return of stocks, given the underlying uncertainty in the performance of the firms. On the other hand, investors know what is the return of the government bonds once they buy them (ignoring possible defaults). Investors also use assets as an insurance device, hence they evaluate the performance of the assets relative to other sources of wealth.

Suppose you are hit by an unexpected negative shock on your income, if for example you lose your job. In that moment, you could sell your assets to get resources to use as a substitute for the reduced income. However, if the value of assets is low at the time, these assets are even less appreciable than assets that have low value in "good times". In other words, investors care about the degree of co-movement of asset prices and their consumption.

With this notion in mind, we should ask the following question: what can rationalize a historical 7.5% equity premium? Is the risk associated with stocks large enough to justify such an equity premium? This question was proposed by Mehra-Prescot in 1985. By using a standard Consumption based Asset Pricing Model (CAPM) with agents having constant relative risk aversion (CRRA) utility function, they showed that only a very high coefficient of risk aversion (greater than 50) could generate an observed value of the risk premium. Plausible values of the relative risk aversion are thought by economists to be less than 3. This is the equity premium puzzle: real investors in real world value risk as requiring a 7.5% premium with respect to safe assets. However, macroeconomic models need agents to be adverse to risk at an implausible degree to rationalize the observed equity premium. A large branch of macro-financial literature have been trying...
to study departures from the standard CAPM model in order to explain the equity premium with a lower and plausible level of risk aversion. In particular, most of the literature has explored how different preferences and different assumptions on consumption data generating process might help on solving the puzzle. I will briefly give you a summary of these two lines of research.

The standard CRRA model assumes time-separable utility across periods. That means that the utility an agent obtains in a period depends only on the consumption in that period. Economists have introduced non-separability in order to solve the equity premium puzzle. For example Abel (1990) showed that habit in consumption with utility depending not just on the level of present consumption, but on its value relative to past consumption, can partially solve the puzzle. However, even with the assumption of non-separability, the risk aversion needed to generate the observed risk-premium is still very large. Instead, Epstein-Zin (1990) proposed recursive preferences, where an agent obtains utility from a non-linear combination of present consumption and future utility. These preferences have received a large amount of attention in the recent literature, given its ability to disentangle the coefficient of risk aversion from the inter-temporal elasticity of substitution (how much an agent like to smooth consumption across time). The tight relationship between these two parameters is one of the primary sources of the puzzle, thus it implies that the recursive preferences are good candidates to provide solutions to the same.

A second line of research on the equity premium puzzle focuses on the assumptions on the data generating process. Then the puzzle can be formulated as the following: given the pattern of macroeconomic variables that we have observed in the last century, only an implausible value of risk aversion can generate the large risk premium. But what if there is something more than “what we observed in the data”? Barro (2006) proposed a model that is able to generate a large equity premium by assuming that the economy can be subject to rare disasters. A disaster is able to ruin the economy, but it happens with a very low probability. Even though in the post-war period there has not been a disaster, investors still take that probability into account.

As a consequence, they require a large premium for bearing a risk, because holding the risky asset might be terribly bad when a disaster hits. On the other hand, Bansal and Yaron (2004) suggests that macroeconomic variables are characterized by a small (and hidden) component that is very persistent, the so called long-run risk. Therefore, when a bad shock hits, it has very long lasting implications. Agents are adverse to this small long-run risk which explains the large premium.

To conclude, the macro-finance literature has been focusing on the equity premium puzzle for a couple of decades now. Explaining how to link macroeconomic variables with financial variables is challenging, but at the same time very important as the recent financial crisis reminded us.

References
Robert Townsend received his PhD in economics from University of Minnesota at 1975. He is now a professor of economics at MIT. Among the many awards he received during his career, he was awarded the Jean-Jacques Laffont Prize in 2011.

His research areas of interest are contract theory, financial economics, macroeconomics and development economics. He began his career as a theorist working on general equilibrium models, and mechanism design. Some of his seminal contributions refer to costly state verification, the revelation principle, and optimal multi-period contracts. Apart from publishing in top journals, he also published the following influential books:

“Financial Structure and Economic Organization: Key Elements and Patterns in Theory and History” (1990),

**Georgios Petropoulos:** Prof. Townsend, first of all, congratulations for the Jean-Jacques Laffont Prize in economics for 2011!

**Robert M. Townsend:** Thank you very much!

**G.P.:** Can you tell us your feelings and your thoughts when you first heard you were going to receive this prize? What was the first thing that came to your mind?

**R.M.T.:** Well, it’s a great honor. I was immediately quite pleased and flattered. Second, I’m pleased to be thought of in the context of Jean-Jacques Laffont because his work is very much based on theory, data, and development. I’d like to think I’m doing some of that, so the fit seems very good with his tradition.

**G.P.:** Let’s go back in time to the period you were deciding about the discipline of your specialization. What was the initial reason for your choice to become an economist?

**R.M.T.:** I come from a long line of economists within my family. My father was an economist who trained at Harvard. I kind of resisted it, as sons tend to resist the occupation of their fathers, but, I was very interested in social science, so I thought I would try out another discipline, like political science. I very quickly discovered that my heart was in economics. My wife is trained in
economics at Duke. My son went into economics and graduated from Harvard and is a professor of finance. My daughter has an MBA from Loyola and works as a financial analyst. So, it seems to be something in the family.

**Jenny Stephenson**: Speak of the Townsend Institute! [laughter] Do you manage to talk about anything other than economics at home?

**R.M.T.**: We all understand each other. [laughter]

**G.P.**: So, you started your career as an economist. You had many remarkable contributions in the field of contract theory and financial economics and from the beginning of Nineties you started being interested in the role and the contribution of financial systems in developing countries. Why did you decide to devote a large part of your research activities to developing countries?

**R.M.T.**: You’re right, I started as a theorist. I was trained in Minnesota. Even though some of my research work could be more applied, I was interested in the theoretical aspects of economic theory. At some point, even as early as my first job at Carnegie Mellon, I started an economic history reading group. I was talking to my students about the experience of early Europe with feudalism and the rise of markets. That led to an introduction to one of my books, "Financial Structure and Economic Organization," Basil Blackwell Inc. (1990). The chapters were theoretical, but the introduction was using this economic history to explain how these theoretical contributions fit in and how they could help us understand these various periods of financial and economic organization, and the changes in the dramatic period of the rise of markets in Europe. I went on to construct a very detailed study of one of those episodes, which was the medieval village economy. This became a book published by Princeton University Press ("The Medieval Village Economy: A Study of the Pareto Mapping in General Equilibrium Models."). Based on historical material, archives of the Bishop of Winchester, and whatever else historians could get our hands on, I was examining these episodes through the lens of economic theory and using the theory to see what made sense or not. In particular, they divided up their crop fields into these long narrow strips, which looked like a lot of fragmentation, kind of a crazy pattern when you look at the maps. But, I wrote down a model, which would work toward explaining that kind of fragmentation, based on the optimal allocation of risk. At that time I was studying village economies, but I couldn’t interview dead Englishmen. I didn’t have consumption and detailed income data either. I became aware of these panel data that had been collected by a crops institute in India. So I began doing tests of these models based on the existing data from India. Although now it’s somewhat dated, at that time it was, I think, 1975 to 1985, ten years of data from villages in India. I visited those villages and became interested in their institutions. That’s where the Thai project began. So, it’s been a slow natural progression. I’ve never given up the theory. Theory is still the bedrock of what I do. Often these data raise puzzles, things that I don’t understand, that make me go back to the theoretical drawing board. So, for me, it was never a choice of one versus the other, of giving up theory to do data. To the contrary, I found that interacting with actual institutions and getting the data or historical materials actually brought the theory to life.

**G.P.**: Indeed, it is always nice if you can test your theoretical model using real world data. Developing countries are characterized by a great variety of political regimes. What do you think was the impact of globalization on the economic growth and performance of developing countries and how this impact is related with their different sorts of political regimes?

**R.M.T.**: The best way to answer your question is to think not about variation across countries but to think about variation across regions or even across villages within a country. There, my understanding is that as the economy opens up so that there is more trade and more financial flows within the country, across villages, there is a different response depending on the village. Some of the most capable villages take advantage of the openness and actually do better. Or, they reorganize in a way that, say, there were some very local valuable institution for sharing risk. That might be mitigated a bit, but they more than compensate by reorganizing in terms of remittances across, you know, workers in Bangkok who no longer live in the village and so on. So, I would say it’s more a pattern of change and evolving institutions. It is true that some villages lose out in the process, both because they don’t have the economic position that makes them well placed with these global trade and financial flows within the country. But, other villages do quite well within that context.

**G.P.**: Do you attribute the difference in growth rates between Asian and Latin American countries to these differences you’ve discussed in the village capability to adjust to economic changes?

**R.M.T.**: Predominantly, my work has been in Thailand, and in Asia. It’s a fairly successful, growing economy, despite the financial crises. I understand pretty well
what’s driving the growth process there, which has to do with taking advantage of existing talent, allowing people to set up new businesses if they’re able, or go out of business and do something else with their money. Education plays a role and the expanding financial system within Thailand has played a role. Now, we have started to work on other countries. In Mexico, in particular, I have tried to repeat a lot of those steps. It seems like some of the basic mechanics are there. There is occupation choice. It’s somewhat constrained by wealth. We’ve simulated some of the same models in the Mexican data with which we’ve had success in the Thai data, and it works pretty well in some regions. What seems to be missing in Mexico that was a dominant force in Thailand is this expansion of the financial system. Going back at least into the 1980s and 1990s, by even conventional metrics, in terms of number of branches per capita and access to ATM machines, Thailand’s system was expanding. But, even in major metropolitan areas of Mexico, these things are surprisingly limited. This raises more questions than answers. I don’t have a coherent economic political story to offer to you to explain why the Mexican financial system has not expanded the way it has in Thailand or in other countries. However, the year 2000 seems to be a bit of a turning point. Some of the commercial banks are becoming more interested in the low end of the market and there are these not-for-profit entities that are expanding in terms of microfinance. Actually, some of them have been so successful that they have been incorporated and raised a bit of a scandal because they made so much money. They have become quite profit-oriented and there has been a big controversy in the newspapers about whether micro-finance should be for non-profit, altruistic-minded individuals or whether it should be a for-profit enterprise. I guess I’m sympathetic with the for-profit motive because it’s certainly very frustrating to not see innovation. Profit allows people to innovate, of course, for their own gain. Mexicans are quite entrepreneurial and this post-2000 period is revealing of that, so my guess is that prior to 2000 and in other countries there are constraints on what banks and financial institutions are allowed to do that prevent this kind of growth. That could just be a simple misunderstanding on the part of regulators. For example, maybe they don’t understand the gains and they become quite conservative in their regulation.

G.P. : Let’s take a closer look to the successful Townsend Thai project. Up to now, you were able to determine how the financial system can affect economic growth and underline the importance of financial deepening. What are your future research objectives?

R.M.T. : So we understand the importance of the financial system, but it is also imperfect on several dimensions so we’re thinking about doing things that would speed up the process of expansion and allow it to reach deeper into the somewhat neglected sectors of the economy. To do this, we have to understand better, even better – but I can use my data to do this – the “demand-side” features, i.e. what financial strategies are households currently employing? Are they aware of financial products that are available in Bangkok but not in the region? Is there a way they would become interested in those products if they became knowledgeable about how they work? Can we create infrastructure that would allow them to link up? On the so-called “supply-side,” the financial service providers, we are entering into partnerships with some of them to understand better what they do and what their current markets are like. We share our thoughts about areas where they might think about innovating. So, the goal is to try to improve the financial system based on the optimal design that comes from the theoretical models but also from the data we have.

G.P. : Do you have any particular time planning for the future goals of the project?

R.M.T. : There are always goals but these things usually take time. It is very fortunate that we always manage to continue forward. If you'd asked me that question fifteen years ago when we began to collect the data, I would never have told you that we have a fifteen year plan... hopefully going on twenty! We have to adapt to changing circumstances; the country itself [Thailand] changes. It just experienced a very damaging flood, which naturally captures the attention and the resources of the government and therefore it is a little bit more difficult to continue at this moment. Fortunately, I have a very good team in Thailand. We've made it through these periods before, and I'm sure we will manage again. We do have a plan, but it's filled with contingencies and options.

J.S. : How is your team in Thailand set up? Do you have a link with a research institute over there?

R.M.T. : When I got started, it was based just on my own field research. I was a one-man team, with some help. But when we wanted to scale up and gather more data, I met and became very close with a former government official who had become an entrepreneur. So, over the years we have set up our own data collection unit – a tight family research project. The funding comes from the U.S. largely, the National Science Foundation and the National Institute of Health, and at one point
the Ford Foundation (during the financial crisis) also helped. It’s quite a sizeable operation. We have 70 full-time people in five different offices spread out across the country. Without my close collaborators, I would be swallowed up in management and personnel issues. But, we interact on the phone, and I go over there once or twice a year. At one point I had a student while I was in Chicago from UTCC (University of the Thai Chamber of Commerce) and it was in one of these periods, wondering about the future and worrying about funding to keep the monthly survey going – which we had planned for one year, not fifteen – and he thought that his young upstart university, unlike the older and more established mainline universities of Thailand, might be interested in a collaboration or partnership. So we set up a research center at UTCC, and it still exists today. They also agreed to fund part of the monthly survey. That center represents the vision moving forward of combining data and research in Thailand. So, I now have two students at that university and maybe six Thai students altogether back in Thailand, and many of them trained as theorists. At the same time this center facilitates access to other data from government ministries so we can get data on healthcare facilities and other specialized data that helps the research project. That part goes quite well.

G.P.: What are your views on the current Eurozone’s debt crisis? What are the policies need to be implemented to reduce the large deficits of European countries? Long run policies that target to economic growth or short run policies that have as a priority budget balance?

R.M.T.: Countries can run short-term deficits and some degree of government debt is probably optimal; it’s not like the goal ought to be to totally eliminate government debt. We have economic models that argue that money and debt are a means of payment to bridge across generations. As in the US, the government spending programs – and this includes defense and entitlements – absorb an increasing amount of money. So the US needs to reform and be on a sustainable path and I think you [Eurozone] need a plan for the fiscal side of the economy. I don’t think you have to implement it immediately. Economists in the market would certainly be assured if the US or European governments were committing to a long-term plan. What’s unnerving is there doesn’t seem to be a consensus. My own view is that the problem in Europe seems to be the need for coordination in the union on the fiscal side. It was set up as a monetary union – and not too surprisingly this undercuts incentives and there was no plan initially for what to do with countries that were chronically running deficits. I know that’s been proposed, and I think to remedy that problem is the right direction.

G.P.: My last question refers to our PhD students here in Toulouse who will be job market candidates in few years and they are looking in the economic literature for new and interesting ideas for their PhD dissertation. What’s the next hot topic? What areas of research would you recommend to our students? I guess, the field of development economics is one of your recommendations.

R.M.T.: I would recommend development economics, but not in a narrow way. I think there are a couple of exciting things about what’s happening in developing countries. First of all, to come back to your earlier question, development went into a well-intended policy-oriented phase of trying to figure out what works in terms of randomized controlled trials and statistical efforts to gauge impact. Many of us realize now that those efforts need to be coupled with an understanding of why some of these policy proposals, when implemented, work, while others have unintended consequences. So we need the models and structure to better understand what we’re seeing as a result of those experiments. But an even larger view of it is that the experiments themselves need to be guided by what we understand about the macro-economy. One goal would be to induce variation that would allow us to get at some of these underlying mysteries, which we haven’t been able to decode based on existing surveys, in order to bring theory and measurement together. I must say that at the macro level – whether we’re talking about a developing country, or countries within Europe and the US, for example – we can’t get away from using and needing and improving macro models of the entire economy. A lot of what I do is to try to understand the financial systems of various developing economies. That takes “macro models,” but these are micro-founded macro models that link the findings in the field with the data of how markets and institutions currently work, measures of how well they’re succeeding and where the shortfalls are, and integrates up into the larger macro picture. Quite surprisingly, there aren’t many people doing it, but this will become one of the hot topics and one of the growth industries in the future. What’s preventing it I’m not quite so sure: I guess there are gains to specialization. We’ve gained a lot from having different subfields within economics – you know, micro is separate from macro and development is not public finance and so on – but I think we’re entering a phase when what we’ve learnt from the subfields will be combined. We’ll be working in teams and partnerships across subfields. I’ve tried to do that, and we’ve set up a consortium that deliberately intermingles people
in macro and finance and industrial organization as well as development. Some of these people are senior-level researchers, some more junior, and we do have students involved. The reaction from the faculty side is very encouraging. They really enjoy talking to people outside their field. They may well have heard of other people but never had the chance to talk to them, so I think that is a very encouraging sign. In general, in terms of guidance to the students, I would say it's really up to them; they are the next generation of researchers and that's where the innovation is most likely to come from. Senior people can help each other in teams, but it's the junior people and the students that are really going to be the ones starting out as the innovators. My advice would be to try to talk to more than one faculty member and to try to talk to several across different subfields. There are so many unexplored issues... I have only so many hours in the day, and I can't nearly explore all the ideas that are coming out of this synthesis. So it's not going to be a situation where you can't find a topic. It's going to be a situation of having too many good things to do and having to choose.

G.P. -J.S.: Thank you very much for your valuable time! I am sure that our students will very appreciate your ideas!

R.M.T.: Thank you!

Crossword

Horizontally:
1 – Basis of experimental sciences.
2 – The menace of new car owners.
3 – Academic authority – “Please, sir, I want some more.”
4 – Can be compact – copacetic.
5 – Five ninths of a situation – estimator.
6 – Grumbles – cold light.
7 – A protocol – canteen – not pure.
8 – Thus – future generation's ability to satisfy theirs can partly define sustainability – along with incentive compatibility.
9 – Must – ninety.
10 – Balances benefits – Great country.
11 – Donald – appreciate – negation.
12 – Authors' preposition – derby, bowler or top – very small.

Vertically:
1 – The … are good but the goods are odd – Robinson.
2 – Maya – recently granted to UT1.
3 – Baths – lab work in France – business school.
4 – Hemingway – not gross.
5 – Note - Common to a seat and a dress – city of angels.
6 – Class of mechanisms – not false – little.
7 – Designed in Toulouse – one side of the force.
8 – Greek letter – graduate degree – namely.
9 – A couple of love birds – Roman pastis – extra.
10 – Made from sands in Canada – in between Americans and Guatemalans.
11 – Just say … – what you will be tomorrow – taught in TSE.
12 – On the caduceus – Latin prefix.

Solutions:
1: OBSERVATIONS
2: DEPRECIATION
3: DEAN
4: S
5: RE
6: VCG
7: RTP
8: SO
9: NEED
10: COST
11: -MC
12: BY

1: ODDS – MRS – C – B
2: BEE – AUTONOMY
3: SPAS – TP – ESC -
4: ERNEST – NET – H
5: RE – TIERED – LA
6: VCG – TRUE – BIT
7: AIRBUS – DARK -
8: TAU – A – MS – IE -
9: ITEM – LI – XT – X
10: OIL – MEXICANS
11: NO – OLDER – IO
12: SNAKE – D – ANTE
I studied the Masters 2 ECOMATH at Toulouse School of Economics (TSE) in 2009-10 after completing my Bachelor’s degree (Affiliated) in Economics from Cambridge. TSE was highly recommended to me by my professors at Cambridge. When TSE graciously awarded me the Eiffel scholarship, there was nothing stopping me from coming to Toulouse. Having lived and studied in an English speaking environment all my life, I was looking forward to experiencing life in a non-English speaking country. I came to TSE with high expectations and Toulouse proved to be an invaluable experience, exceeding expectations.

Apart from the perfect mix of academic rigor, advanced teaching and a diverse curriculum, it was the people whom I met during my year at Toulouse who made my year so wonderful – the professors who taught me and whom I worked with along with my seniors and classmates, who provided the stimulating peer interaction and social contact.

After Toulouse I decided to work for Frontier Economics, an economic consultancy at their London office. While I was interviewing at various economic consultancies I was pleasantly surprised by the high repute that was accorded to TSE. Toulouse is known in the industry for its high academic standards and is considered the microeconomics powerhouse of Europe. I was the second graduate from the TSE Masters 2 program to join Frontier Economics. I can easily say that the best thing about my job is that here I apply all the economics that I have learned, every day. In my almost two years of working with the firm I have worked across the public policy, transport, competition and telecommunications practices. The type of work I engage in varies from complex econometrics modeling to predict average journey times on England’s road network to exploring the interdependencies across infrastructure sectors using a case-study approach. I have conducted overlaps analysis for a competition case, cost modeling for a developing country’s telecoms regulator and I am currently working on analyzing the economics of climate resilience for the UK government.

Through all my work at Frontier, the one common thread has been the microeconomics which forms the foundation of this job – the microeconomics that TSE taught me extremely well. TSE not only gave me the best year of my life, some of my dearest friends but also prepared me to the fullest for the rest of my life to come.

Girija S. Borker  
— working for Frontier Economics, an economic consultancy at the London office

Andrés Blancas Martínez  
— Director of Rail Fares in the Ministry of Communications and Transport of Mexico

I work in the Ministry of Communications and Transport of Mexico as Director of Rail Fares since my arrival from the Master in Economics of Markets and Organizations at Toulouse School of Economics in August of 2011. In Mexico rails are intensively used by “heavy” industries but in less proportion by “light” industries and agriculture (e.g. corns). There are few lines for passengers across the country in comparison with Europe—in Mexico the main interstate mode of transportation for passengers are buses.

To be offered by this job, the Master at TSE was very important part of my Resumé since it is quite recognized on international grounds as one of the leading universities on applied microeconomics, industrial organization, incentives, regulation and competition policy. At the Ministry of Communications and Transport I have colleagues...
from recognized universities as Harvard, Chicago, LSE, between others, and the level of instruction of TSE is very competitive compared with those universities. In Mexico reputation of TSE is increasing even with only few graduates in comparison with other universities.

During the Master at Toulouse School of Economics I did focus my studies on topics related to competition and regulation. I would like to say however that TSE gave me an impressive theoretical framework and economic basics in order to understand regulated markets and competition. Teaching at TSE is serious, academic production is lading and efficient, alumni are extremely competitive, all of these yields a perfect environment to develop prominent economics in Europe within the top academics in the world.

With this framework I can understand the objectives set when railroads were liberalized, why regulator did what it did, but also to identify the achievements and failures after fifteen years of liberalization.

In my current job, I am in charge of the administration and execution of rail fares regulation, interconnection charges between operators and insurance of the lines. An important part of my duties of course, is to identify and propose new regulation at different levels in order to improve the performance of the industry, increase the usage of rails and establish an adequate competition playing field. Apart from the operative tasks, which involve fare registration (rail fares are set free by operators) and verifications, at this moment I am working mainly providing documents in order to illustrate how changes in different levels of regulation can improve drastically industry performance. These documents include changes in laws, objectives of the proposal and costs and benefits.

This is not an easy task since regulation in Mexico is complex and difficult to modify. I expect however to place some proposals into the rail legal framework. All of these proposals have an important technical background, which comes from my studies at TSE.

Do you really need to know the number of opportunities that TSE can give you? Honestly, I am not sure. I have the feeling that almost all of you are perfectly aware of this. Normally you do not apply for a master in a highly recognised institution by chance. Most of the times, you are considering the idea of getting into a PhD program (in the same institution or somewhere else), or you want to find a job that has something to do with research. Generally speaking, you want to “promote” yourself. From this point of view I can say without any hesitation that TSE signaling works well. I got a good job in Belgium right after the master, and at the same time the possibility to enroll in a PhD program in Italy on a subject very close to the thesis I have defended last summer in Toulouse. But also in this case, I feel that I am not saying anything unknown to you. It is not only a matter of reputation but, if we want to keep the conversation at this level, TSE graduate students very often “fulfill” the expectations. They look well prepared to potential employers, and actually they are.

I think everything comes from the kind of program (there is no uniqueness in this respect). Only few months if you count, but they are months in which the “exposure to knowledge” is really high, both in terms of depth and width. It is not trivial to survive to such stressful rhythms. “If I had more time”. This sentence was often the prelude and the postlude of an exam session. “Given the allotted time, what is the sense of setting almost unreachable targets? Teachers are meant to make things understandable to students, not the reverse”, a friend of mine was more or less saying. On the one hand, I do agree with him. Overall, these tough programs are often more about the Darwinian selection of minds than the transmission - decodification - of complex knowledge. On the other hand, it is also true that even if your efforts are not always immediately rewarded, in a more dynamic perspective you will realize that you know much more than expected. If not pure knowledge, you will have got a conscious technique towards it, which means precious tools for the future. I personally feel lucky for what I have achieved in such a challenging, unique environment.

I am not saying that with these tools you will be able to “conquer the world” and get exactly what you want. Competition crosses TSE borders, and success is a result of many components, among which economic situation, luck and timing do play a role. What I want to say is that if you add a bit of self-confidence and passion to the academic preparation you get from TSE, you will become valuable candidates for many positions. Whatever the “contest” you will decide to try, I wish you all the best of luck.
Introduction

Very few days are left before the French are to democratically elect a new president. It would be naive, however, to consider the outcome as a decision that naturally arises out of the expression of the people. Democratically means here that everybody could influence the decision through his or her vote. Yet the election process may partly shape the results as well. The influence of institutions on actors’ behavior is a question which economics has studied since a long time, which makes our intellectual discipline relevant for analyzing the collective choice system in which you may soon participate.
Current electoral rules

Historically, the current system for French presidential elections, the so-called scrutin uninominal à deux tours (which will be referred to henceforth as top-two runoff voting), dates back to the referendum-approved constitutional reform of 1962. It can be seen as a version of a two-stage plurality rule, where the candidate with the most votes wins: at the first stage each voter chooses one of the competing candidates. If a candidate obtains more than half of the votes, they are elected. Otherwise, the two candidates with the most support enter the second stage. At the second stage, each voter chooses one of the remaining candidates. The candidate with the most votes wins.

In the spirit of Charles de Gaulle, the first President of the Fifth Republic and a major source of inspiration for its Constitution, the President of the French Republic was meant to be a force above the parties and the legislative assemblies, and to represent the unity and national integrity of France. To ensure this symbolic power is respected, and to grant legitimacy to a function which involves substantial executive powers, the President was to be elected in an indisputable way. This favors a system in which the elected candidate is chosen explicitly by more than half of voters, be it in the first or the second round of the election.

Another virtue of the top-two runoff voting can be understood in comparison with the one-round plurality rule which remains one of the most widely used voting schemes in the world for the election of public officials due to its unquestionable simplicity. It consists of letting every voter choose one candidate, and simply selecting the candidate with the most votes. Under such a rule, one can note that voters with minority views have a strong incentive not to vote sincerely and to opt instead for a candidate they anticipate being more popular. Under the top-two runoff voting, however, voters may be more likely to express their true preferences in the first round, given that they will be able to choose amongst the best-placed candidates in the second round. This feature could be summed up in the following statement: “In the first round you choose, in the second you eliminate”.

In addition to giving voters an incentive to vote strategically, the one-round plurality voting suffers from another shortcoming. Imagine, for example, that a candidate A would win against B and that a third candidate C, politically close to A, enters the contest. Then sincere voters who initially preferred A might instead vote for C, possibly leading to B winning the contest. Because adding new candidates changes the collective ranking of the old candidates, this election rule is said to depend on irrelevant alternatives. All these comments call for choice rules that may better represent voters’ preferences than the one-round plurality vote. The top-two runoff voting may be a solution, but there are several other alternative voting rules.

Historical proposals

A famous debate at the end of the 18th century between the Marquis de Condorcet and Jean-Charles de Borda saw the two men each propose a different electoral rule to overcome the shortcomings of the one-round plurality rule. The Condorcet method (1785) would consider every comparison between every possible pair of candidates in an election; the Borda rule (1784) would calculate a total score for each candidate based on every voter writing a complete
preference ranking. Both methods have their strengths but also weaknesses: we are not guaranteed to always have a winner under the Condorcet method, and the Borda rule does not display independence from irrelevant alternatives. Besides these issues, perhaps the most compelling reason why such methods are not observed in reality is that they would lead to complex, and hence costly, electoral systems.

The single transferable vote system is also worthy of consideration: in its form for the election of an individual candidate (which is known as the Hare rule), it is currently used to elect public officials in some countries, such as the president of India or the president of the Republic of Ireland. It was initially introduced in England by Thomas Hare in the middle of the 19th century and described as “among the greatest improvements yet made in the theory and practice of government” by John Stuart Mill, one of its early supporters. Under this rule, people are asked to provide a complete ranking of all candidates. The selection of the winner then proceeds as follows: if one of the candidates was ranked first by more than half of the voters, they win. If not, the candidate with the smallest count of first choices is withdrawn and the rankings updated. The operation is repeated until a candidate reaches an absolute majority.

Impossible n’est pas français... unless you’re talking about elections

It is interesting to note that neither the top-two runoff voting nor the Hare rule definitely solves the two issues that arise with the one-round plurality rule. Firstly, neither of them displays independence of irrelevant alternatives. To understand this, consider the preference profile represented in Table 1. In this profile, Louis XIV is the Condorcet winner: if you count up the number of one-on-one comparisons he would win, it is greater than for either of the other two candidates (six, as opposed to five for Napoléon and four for Charlemagne). Napoléon, however, would be elected under both the Hare rule (Louis XIV is only ranked first by one voter as opposed to two, so is eliminated; Napoléon then beats Charlemagne because he is ranked first by three people given Louis XIV’s elimination) and under top-two runoff voting (Napoléon and Charlemagne would both get through to the second round, then Napoléon would win). The Condorcet winner isn’t elected under either of these two common electoral systems! It is also true that neither of two rules is independent of irrelevant alternatives: if Charlemagne were to withdraw from the election, Louis XIV would be elected instead of Napoléon. In reality there are very few currently used electoral rules that are independent from irrelevant alternatives. A strong theoretical argument developed by Kenneth Arrow (1954) justifies this observation in the form of an impossibility theorem. It is shown that no electoral rule can satisfy the independence of irrelevant alternatives along with some other mild requirements for all preference profiles. This logical impossibility has bleak implications for election design.

When calculating who would win in a top-two runoff election using Table 1, we assumed that voters would not behave strategically. But on closer inspection we can see that voters in the last column would be better off voting for Louis XIV instead of Charlemagne in first round; without doing this, Napoléon (their third choice) is elected, as we saw in the above paragraph; but voting for Louis XIV would mean the second round would be a contest between Louis XIV and Napoléon, which Le Roi Soleil would win – third column voters would get their second choice instead of their third choice by not voting truthfully. This corresponds to the notion of vote utile often evoked in the French media. Under the Hare rule, those voters would also be better off misreporting their preferences and mimicking the first column voters’ preferences by a similar logic. This sensitivity to strategic voting is a legitimate concern for any democratic institution. Indeed, realizing that an election can encourage people to vote against their true preferences may bring puzzlement and disappointment to voters – and economists. In fact, for any non-dictatorial choice rule – that is, where there is no one person whose vote controls the outcome – there exists some preference

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<tr>
<th>Number of voters</th>
<th>2</th>
<th>1</th>
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<tbody>
<tr>
<td>First choice</td>
<td>Napoléon</td>
<td>Louis XIV</td>
<td>Charlemagne</td>
</tr>
<tr>
<td>Second choice</td>
<td>Louis XIV</td>
<td>Napoléon</td>
<td>Louis XIV</td>
</tr>
<tr>
<td>Third choice</td>
<td>Charlemagne</td>
<td>Charlemagne</td>
<td>Napoléon</td>
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<table>
<thead>
<tr>
<th>Table 1: Voters’ preferences</th>
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<td>Reading key: Imagine a duel that opposes Napoléon to Louis XIV; the single second column as well as the two last column voters would vote for Louis XIV whereas the two first column voters would vote for Napoléon so Louis XIV wins the duel.</td>
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</tbody>
</table>
profile such that some voters may be better off not voting sincerely. This is formalized in the economic literature in the Gibbard-Satterthwaite theorem. The previous example shows us that such an issue can arise even with a very plausible preference profile.

These results from economic theory are rather gloomy. But do they really transfer over into real life? Much of economic theory assumes rational, forward-looking agents, and in the context of election theory, votes are assumed to be cast by rational voters with knowledge on the beliefs of all other voters and unlimited cognitive ability. Empirical studies of voters’ behavior are not coherent with this view, introducing limited capacities of the electorate, little information about political facts, and insufficient cognitive skills to properly formulate strategies. Proper understanding of the complex mechanisms at work requires a more controlled setting, and economists have responded to this by heading to the laboratory.

Experimental approaches

Rational choice theory states that agents will vote so as to maximize some expected utility function given their beliefs on how others vote; testing the existence of rational strategic behavior with survey data is therefore very difficult because of the difficulty to obtain measures of preferences and beliefs. There is room here for lab experiments, where preferences are controlled by monetary reward systems and beliefs over likely outcomes observed through repeated experiments. This approach has been used by TSE researcher Karine Van der Straeten et al (2010). In the lab, with induced single-peaked preferences, the authors observed voters’ behaviour under one-round and two-round electoral systems, the single transferable vote system mentioned above, and another system called approval voting. Under this electoral system voters simply make a binary choice for each candidate and the winner is the candidate with the most votes. Under this rule, rational voters should look at the candidate who appears to be receiving the most votes (the leader), and put a positive vote for all candidates they prefer to the leader and a negative vote for all those to whom they prefer the leader, then approving the leader if they prefer them to the main challenger. The authors found that the predictive power of strategic voting theory was very high in this electoral system. Conversely, under the Hare rule (as used in Ireland and India), the theoretical optimal strategic vote would require the backward solving of a decision tree with as many levels as there are candidates. The findings of the paper are unsurprising: faced with such a complicated calculation for optimal strategic voting, agents simply vote sincerely. This supports the hypothesis that voters act strategically only when it is not too complicated to do so. As for the voters’ behavior under one-round and two-round voting rules, the authors found evidence that voters resort to what they call the top-two and top three heuristics. This means that voters coordinate on which they prefer of those whom they expect to be respectively the top two or top three candidates, deserting nonviable candidates. This supports the idea that sincere voting remains limited.

Conclusion

Voting rules may substantially alter the outcome of an election due to mechanical aggregation effects but also to induced strategic behaviors. We saw that there is no perfect voting rule in the sense that an aggregation process may necessarily induce some paradoxical or undesirable effects. Election results depend not only on preferences, but also on voting strategies, which can depend heavily on the chosen election rules. In an experimental set-up it was found that the voting rule significantly affects which voting behavior is the most likely to arise, with observed behaviors including sincere voting and strategic voting, but also simple heuristics in cases where the cognitive load demanded of voters was too high.

An analytical approach sometimes discards some of these essential elements. We would lastly like to mention phenomena of practical importance that may also strongly be shaped by electoral institutions. First of all, political alliance decisions (and the related concept that is pluralism) may be affected by electoral institutions. And last but by no means least is the issue that the electorate’s decision of whether to vote (and the related aggregate measure that is abstention) may also be influenced by such institutions.

Democracy is not a natural process. Any thought about it cannot disregard the design of its most fundamental institution. We hope this brief presentation of the relevant issues in this field has whetted your appetite for a topic that is still a popular subject for research with many unanswered questions.
### An illustrative survey

In order to illustrate the argument, a small survey was conducted among 100 TSE students met in the cafeteria during the second week of March. They were asked to provide their voting intentions, a full ranking of candidates and their approval for each candidate. A first interesting fact is that, out of 76 complete answers, 8 students (11%) declared they would not vote for their first choice in first round. Most of them were apparently expressing a vote utile as defined previously. However, a few other strategies are observed. This illustrates the diversity of expressions that can arise in such a system. Another interesting exercise is the following: according to these exhaustive measures of preferences, we can show what would be the outcome under several different voting rules. The outcomes of such elections are summarized in Table 2. Unfortunately for the sake of the example, in this case, François Hollande is a Condorcet winner and is elected regardless of the election rule.

<table>
<thead>
<tr>
<th>Number of Voters</th>
<th>Presidential round 1, sincere voting (%)</th>
<th>Presidential round 1, stated voting (%)</th>
<th>Approval rate (%)</th>
<th>Hare rule under sincere voting (%)</th>
<th>Borda score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathalie ARTHAUD</td>
<td>1</td>
<td>0</td>
<td>31</td>
<td>-</td>
<td>271</td>
</tr>
<tr>
<td>François BAYROU</td>
<td>11</td>
<td>9</td>
<td>60</td>
<td>-</td>
<td>607</td>
</tr>
<tr>
<td>Dominique DE VILLEPIN</td>
<td>7</td>
<td>5</td>
<td>52</td>
<td>-</td>
<td>476</td>
</tr>
<tr>
<td>Nicolas DUPONT AIGNAN</td>
<td>1</td>
<td>3</td>
<td>25</td>
<td>-</td>
<td>238</td>
</tr>
<tr>
<td>François HOLLANDE(*)</td>
<td>37</td>
<td>41</td>
<td>70</td>
<td>51</td>
<td>653</td>
</tr>
<tr>
<td>Eva JOLY</td>
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<td>10</td>
<td>51</td>
<td>20</td>
<td>440</td>
</tr>
<tr>
<td>Marine LE PEN</td>
<td>12</td>
<td>3</td>
<td>24</td>
<td>-</td>
<td>177</td>
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<tr>
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<td>-</td>
<td>233</td>
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<tr>
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<td>8</td>
<td>52</td>
<td>-</td>
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<tr>
<td>Hervé MORIN</td>
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<td>0</td>
<td>35</td>
<td>-</td>
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<tr>
<td>Nicolas SARKOZY</td>
<td>19</td>
<td>23</td>
<td>55</td>
<td>29</td>
<td>486</td>
</tr>
</tbody>
</table>

### Table 2: Results of different hypothetical elections

(*) Condorcet winner. The winner according to each electoral rule is in bold.

1 Under sincere voting, a voter is assumed to vote for his or her first choice whereas stated voting rely on stated intentions
2 The results presented reflect the proportion of vote to the remaining candidates once an absolute majority is reached.
3 The Borda score are calculated as follows: A candidate gains 10 points when ranked first in a voter’s preferences, 9 when second and so on.

**DISCLAIMER:** This poll did not respect some of the usually respected guidelines for surveying an electoral population, and does not claim accuracy or representativeness of the TSE student population. This poll does not in any way reflect an official position of TSE, nor any kind of endorsement for one candidate whatsoever.

To further the experiment, we invite you to visit the recently launched website [http://voteaupluriel.org/](http://voteaupluriel.org/). Besides learning more about voting rules in other countries, you can take part into an online vote to elect the President of the French Republic using four different voting rules.

### Further readings:

Jean-Charles de Borda, Mémoires sur les élections au scrutin, in Mémoires de l'Académie des Sciences pour 1781, p. 657-665, 1784
Condorcet, J.A.M. Caritat, Marquis De, (1785), Essai sur l'application de l'analyse à la probabilité des décisions rendues à la pluralité des voix, Imprimerie Royale, Paris.
Jean-François Laslier, Le vote et la règle majoritaire, Editions CNRS, 2004
I am at a big disadvantage in thinking about why economists ought to be interested in history. My problem is that for me history is fun – so much fun, in fact that I have to be prised away from reading history in order to study other more immediately urgent subjects. I’m currently reading Laurent Dubois’ Haiti: The Aftershocks of History. Just before that it was Anna Reid’s Leningrad, an account from eyewitness records of the terrible siege of the city that began in 1941, lasting two and a half years causing three quarters of a million people to die of starvation. And books like Jared Diamond’s Guns, Germs and Steel have had a powerful influence on the way I think about the world we live in.

I also get a tangible surge of utility from reminders of history in my physical environment, like the sense as I cycle past the St. Sernin Basilica on my way to the Manufacture des Tabacs that these gorgeous pink bricks and white stone pediments were standing there hundreds of years before I was born and will probably still be standing hundreds of years after my death. I can’t imagine inhabiting a city, or a country, or a planet, without wanting to know something about those who inhabited it before me. It’s not a noble intellectual motivation – it’s similar to liking gossip – but it’s a very powerful one.

So if an economist who isn’t interested in history asks why he or she ought to be I really don’t know what to say. It’s almost like someone asking why they should be interested in food or in sex: if you have to ask, you’re probably not going to be receptive to the answer. So let me take a different tack: why would I be more likely to trust an economic analysis of a current feature of the world if it took some account of the history of how that process came about? Why, to put it in jargon terms that only economists will appreciate, are the best economic models usually non-Markovian?

To get one irrelevant objection out of the way: this has nothing to do the truth or otherwise of philosophical determinism. If we had absolutely complete

**WHY SHOULD AN UNDERSTANDING OF HISTORY MATTER TO ECONOMISTS?**

— Paul Seabright
So why do events in the past matter for specifically economic behavior in the present? They can shape our beliefs, and they can shape our preferences and our emotions (in practice the two kinds of process are less distinct that this makes them appear). To take a topical example, it seems likely that the current financial crisis could have been avoided if regulators had been more alert to certain kinds of risk (of bubbles in real-estate markets, of the accumulation of opaque financial derivative products, of the dependence of the shadow banking system on large-scale wholesale funding). The fact that they were not so alert was due in part to the widespread belief that we now understood the causes of the Great Depression and were therefore well equipped to prevent it from happening again (for more on this, see http://www.foreignpolicy.com/articles/2011/1/02/the_imagination_line?page=full). Robert Lucas had even told the American Economic Association in 2003 that “the central problem of depression prevention has been solved, for all practical purposes.”

When the post-2000 financial system went into meltdown, it did so in ways and for reasons that were very different from those of the 1930s. But this was not an accident: the hubris induced by our understanding of the 1930s was a major part of the reason why the financial system’s vulnerabilities were now to be found at a quite different point. As with predators and prey in an ecosystem, the strategies of regulators and regulated co-evolve. What the regulators think about the past provides a powerful signal to the smart money that seeks to work its way round regulations designed to prevent a repeat of the past. Understanding our vulnerabilities in the present, therefore, requires us to think about how we understand the past, and about how our simplistic understanding of the past can in turn be used against us.

Much of what is fun about history lies in the way it reminds us of the strangeness of our modern world. Each time I read about life before anesthetics, or about the fact that 40% of infants died in their first year of life in 18th century London, or about the fact that hunter gatherers were ten times more likely to die a violent death than an average citizen of the world today, I realize what a startling achievement it is that cooperation in modern society works at all. Still, there are some human universals, and hubris is one. As Rinehart and Rogoff’s recent book This Time is Different reminds us, every financial crisis has been preceded by assurance from some very clever people that crises are a thing of the past. Reading history won’t banish crises, but it might make their arrival a little less of a surprise.
The impact of fuel costs and carbon permits on European airlines

— Marc Ivaldi

Fuel costs play a critical role in the air transport industry as they represent a significant share of airlines' operating costs while they are subject to changes due to shifts in oil prices or energy policy regulation. In recent years, the industry has experienced dramatic increases in fuel prices, which have sometimes tripled compared to their levels of 2002, reflecting the path of equilibrium prices on the spot markets for oil products. Meanwhile, the increasing concerns on the warming effects has raised the question of the impact of aviation emissions and prompted new regulation. In particular, from 2012, the European Union requires airlines to trade allowances to reach their capped level of emissions. These environmental policies should translate into additional expenses by indirectly raising energy costs. The sensitivity of air traffic to these changes and possibly the magnitude of their impact on the traffic levels are key factors to address. Indeed these changes impact public policy decisions relative to the capacity choice for the air traffic control system or the management of airports. They could also impact the structure and the competitive situation of the airline industry. Apparently they have collateral effects on trade policy if it is confirmed that the Chinese authority has decided to freeze the orders of Airbus aircraft. These motivations and objectives motivate the research project that Tuba Toru (PhD candidate at Toulouse School of Economics) undertook under my direction. She has tailored a methodology based on the economic literature to account for the features of the airline industry and then applied to a data set on European airlines. The main novelty here lies in the choice of a game-theory-based model to assess the effect of changes in fuel costs and the impact of carbon permits. The investigation is indeed performed by means of a Bertrand-Nash equilibrium model of the industry where airlines provide differentiated products to consumers and compete in price. More precisely, this theoretical framework yields a structural econometric model which comprises a demand model of air transport services explaining how consumers select among the products supplied by the airlines and a pricing equation that describes how each airline sets her best price strategy given the cost structure she faces. This approach has several advantages. First, as a behavioral model, it is an adequate way to measure the policy impacts which are aimed at changing behaviors. It should lessen the risk encountered when one attempts to evaluate directly the effects of these policy changes on prices by means of ad hoc relations between prices and policy variables without having specified the behavior behind these relationships. Second, this approach enables to address the issues at stake within a competition model, which means that it offers the
opportunity to check whether the proposed policy impacts the state of the competition among airlines by taking into account how they adapt their strategies. In other words, the evaluation of the effects of change in energy costs is performed within a market environment as close as possible to the real world. Finally, it enables to correctly estimate key economic parameters such as demand elasticities or marginal costs which are used to test whether this model indeed reflects reality.

Briefly summarized, the main results that Tuba Toru exhibits are the followings. First, the airline industry in Europe is highly competitive with relatively high own and cross price elasticities. Nonetheless, economic margins are relatively large. Second, an increase in energy costs implies higher air fares and lower traffic levels. As a consequence, both consumer surplus and profit dwindle. Note that these effects are not negligible: A 50 percent increase in fuel prices translates in a 10 percent increase in air fares on average. Note also that the cost pass-through rates is very high, which means that airlines are able to pass most of cost changes to consumers.

In terms of carbon-dioxide emissions, the analysis shows that the system of carbon permits can be effective: At a permit price of $20 per ton, emissions would be reduced by 9 percent. Now, at this price level, which corresponds to a 50 percent increase in fuel prices, the cost of emissions produced by European airlines would just represent 3.4 percent of their annual profits. In other words, the study supports the conclusion that the European emissions trading system could indeed significantly impact the level of emissions of aviation while it should not drastically change the competitiveness of European airlines. However, the analysis also confirms that the airline represents a small share of CO² emissions: According to Tuba Toru’s estimates, the European airlines would produce around 100 millions tons of CO², which corresponds roughly to 2.5 percent of annual emissions in the European Union. Hence, a policy aimed at reducing CO² emissions of aviation would have a negligible effect on overall emissions.
I. Introduction

It may seem strange that economics tries to explain terrorism. Indeed, from the first courses of economics we know that one of the main assumptions of the science is that individuals are rational, that is, they take rational decisions to maximize their utility. But what is rational about suicide bombings? How can going to war be a rational decision?

Apart from the argument above, it also seems to be very cynical to use economics to explain terrorism. In regressions, number of killed and wounded people is just a “regressor” and statistics does not include the amount of grief into the models.

While this is all true, we still ask: if not economics, which science should and can deal with it? It does not seem that either physics or biology can address this issue. Sociology tackles with huge mass of people and psychology explains individual behaviour. History could be a good guess because it studies past to predict future, but no quantitative evaluations are done. Economics incorporates history, mathematics, psychology and allows to ask and answer the questions: “What are the reasons for terrorism?” and “What could be the ways to prevent it?”. So, even somewhat cynical it still tries to find a helpful answer.

In this article I will speak about applying economics to a particular war: the war between Russia and the Chechen Republic which is a very recent conflict. I provide the first econometric results from regressions of level of terrorist activity on various explanatory variables.

II. The Modern History of the Conflict

2.1 The First Chechen War (1994-1996)

The modern conflict between Chechnya and Russia broke out due to the former’s desired independence from the latter. On the wave of dissolution of the USSR all Soviet republics declared sovereignty and, later, independence from the USSR. At the time a revolution took place in Chechnya with Dzhokhar Dudaev as the leader. On November 1, 1991 he issued a decree of Chechen Independence. In the period 1991-1994 Chechnya was de-facto independent from Russia but inability of the Chechen leaders to impose stability in the region, inability to control the theft of natural resources in Chechnya and stop economic degradation led to the war. The peace treaty was signed in 1996 in the Chechen city Khasavurt.

2.2 The Second Chechen War (1999-2009)

The politicians could not retain the peace and it happened to be unstable. There was a series of terrorist attacks in the interwar period but the war did not break out until after the terrorist attacks committed in August and September 1999. In August 1999 the militants from Chechnya attacked some villages in Dagestan (a bordering republic) and on September 4 apartment buildings were blown up by terrorists.

The Second Chechen War is not an official name of the conflict but that is how it is now usually referred to. Officially it is known as the regime of the counter-terrorism operation which was only repealed on April 16, 2009. The active phase of the conflict with a
large army involvement can be dated to the 1999-2000. Afterwards, the operations were mostly carried out by the Federal Security Service.

Nowadays, Chechnya is highly independent from Russia and while the peace is claimed to be settled between Chechnya and Russia, the large amounts of money are transferred to Chechnya, presumably, to “buy” peace starting from 2001 up to now. It would be difficult to say that the war is over. Rather, the conflict continues to smoulder and stability is fragile.

III. The Data and Results

The data comes from the National Consortium for the Study of Terrorism and Responses to Terrorism (START). The dataset is called The Global Terrorism Database (GTD), which is an open-source database of terrorist acts that covers the period from 1970 up to now worldwide. For the study undertaken the data set was extended using additional demographic data from the Federal State Statistics Service. The final dataset that was used for econometric estimation is of panel data type. It consists of 224 observations, for years 1995-2010 for cities and territories excluding the North Caucasus region. The reason for excluding the North Caucasian region is that we wanted to estimate the probability of being attacked for regions which do not “produce” terrorist activity.

The dependent variable is Number of Attacks in a given town in a given year which is categorized into three “Level of Attacks” (0 attacks means “No attacks level”, 1 attack=“Low level of attacks”, 2 and more=“High level of attacks”). Thus, the dependent variable represents a natural ordering for terrorist activity and is used to run an ordered probit regression.

The explanatory variables are: population, regional capital (dummy, =1 if a city is a capital of a region), transfers (dummy, =1 for 2001-2010, years when a flow of transfers from Russian Federation to the Chechen Republic started), number of killed in previous year, number of wounded in previous year, area of territory, real gross regional product, dummy for year 1996 and dummy for year 2010 (the first peaceful years after the first and the second Chechen wars).

The main results from running an ordered probit regression could be summarized in the following statements (a table with regression results is available upon request from the author):

1. The number of killed and wounded people in the previous year for a territory/city is not significant in the explanation of the level of terrorist activity.
2. The density of population is the most important variable in explaining the terrorist activity. There is a higher probability of being attacked for densely populated territories.
3. Economic development of a region/city (measured by gross regional product), population and area, whether a region is a capital or not become insignificant after inclusion of the density of population variable.
4. Moreover, transfers are insignificant in the regression, thus indicating that transfers (“aid”) do not reduce terrorism.
5. An interesting result is that year-dummy variables for years 1996 and year 2010 are significantly positive in all regressions. Recall that these are the first “peaceful” years after the First and the Second Chechen wars. It may be an evidence of that the peace was perceived to be "unjust" by the Chechen rebels and they increased their activity.

IV. Discussion and conclusions

The results demonstrate that number of killed and wounded people does not influence the terrorist activity. Why it should, though? Presumably, from a point of view of a peaceful person terrorists want to maximize number of killed and they somehow should take into account these numbers. But they do not. Possibly, it is because there are several terrorist groups in the Chechen Republic which act independently of each other and they do not take the overall amount of terrorist acts into consideration. Also, it could be that terrorists attack when they have resources without relation to the number of killed.

It seems that the most important factor for the level of terrorist activity is density of population. Does it make sense? It seems so, because the impact of an attack is higher in that case.

What is noteworthy is that in the ordered probit regression of level of terrorist activity on economic development of a region, dummy for being a regional capital, dummies for year 1996 and 2010, and transfers we have obtained a significantly negative coefficient for ‘transfers’. It would have supported the claim that “aid” reduces terrorism. However, the result is not robust to including density of population into the model.

Although interesting the results might be, we should not forget that they are still preliminary. For example, “transfers” is a dummy variable for years when there were money transfers to the Chechen republic, so it is possible to give various interpretations to the variable. Additionally, we should also think of a smart way of including terrorist activity in the North Caucasus region into the data. This is left for future research.
Is it possible to provide essential goods and services to the poor relying on a market-based approach? This idea, originally proposed by Coimbatore Prahalad and Muhammad Yunus, has aroused the interest of an increasing number of firms. The underlying logic is simple: billions of people, mostly in rural and suburban areas, are still excluded from the globalized market and experience intolerable living conditions (no access to safe drinking water, no electricity, chronic malnutrition...). Their situation is not only due to their low revenues. Indeed, the consumption products available to them are generally expensive, located far away from their house and maladaptive to their needs. Private companies, and in particular big businesses, could thus help them to improve their situation thanks to their technological know-how, their ability to implement large-scale projects and to generate economies of scale, their innovation capability...

The originality of this concept is to claim that charity is not necessary to undertake these efforts, and that private companies can also benefit from adapting their model to the poorest people. For instance, Prahalad argued that big businesses had been short-sighted for too long: inventing a new model which would fit the purchasing power of the poorest would, indeed, open a new market still untapped, which he estimated at 13 000 billion dollars and called the Base of the Pyramid (BOP). Moreover, this would generate many positive spillover effects for the company, in terms of technical and economic innovation, reputation... The social business invented by Yunus relies on the same logic, but adds a formal constraint for the use of benefits: all the profits are reinvested in the activity and the distribution of dividends is forbidden.

These concepts have experienced a high success. In the universities, research positions dedicated to the issue of consumption at the Base of the Pyramid have been created; and many students have chosen this field for their academic specialization. An increasing number of firms, especially in France, have seized these ideas and tried to adapt them to their specific sector.

During one year, we studied five projects launched by French multinational corporations in developing countries: Grameen Danone (nutrition, Bangladesh), Grameen Veolia Water (water, Bangladesh), Lafarge (housing, Indonesia), Schneider Electric (energy, India and Africa), and Essilor (visual health, India). Our aim was to understand the reasons that encouraged those companies to address the question of the BOP in their particular sector.

Moreover, we wanted to assess the validity of the initial promises made by Prahalad and Yunus: what can we expect from the arrival of multinational companies among the development actors?

In our panel, we saw two different groups appearing. First, Danone and Veolia have chosen to set up a social business jointly with Grameen, a group created by Muhammad Yunus that gathers NGOs and social businesses. Grameen Danone and Grameen Veolia have established themselves in a small Bangladeshi village, respectively to produce and sell yoghurts with an improved formula to contribute to the children's growth, and to purify natural water in a region where it...
is naturally contaminated with arsenic. For both firms, the initiative came from the CEO, the communication is abundant and the projects show the willingness to introduce a breakthrough in the activity. For Danone, the social business is a way to make the corporate identity, based on the refusal to oppose social impact and financial profit, more concrete. For Veolia, it is an opportunity to invent a new model more adapted to rural areas. The social businesses are thought of as “perfect companies”, namely businesses that seek social impact instead of financial profit, that are profitable and sustainable, that create jobs locally and that respect high social and environmental norms.

Second, Lafarge, Schneider Electric and Essilor have tackled the issue of poverty on a different manner. These companies are “business to business” and not “business to consumers”, and the intermediates are often inexistent or inefficient in the developing countries. The approach of those companies consists in inventing, on the long run, a new economic model allowing them to accompany their clients as far as the poorest households. The most famous example is Essilor, which set up a fleet of small trucks that travel all over India to make optical tests, give prescriptions and sell glasses for less than five dollars.

The comparison of those five projects teaches us the following insights. First, the motives that led the companies are numerous, and do not exclude each other (real altruism, strategic communication, management tool, willingness to innovate and open future markets…). Second, if, in most cases the pilot projects make the win-win logic a reality, a lot of obstacles stand in the way of scaling up the initiatives. The profitability, if positive, remains very small and an external funding source is necessary in most cases. For instance, Grameen Danone and Grameen Veolia have implemented a mechanism of cross subsidies: the losses in the “social” branch are compensated by profits made in a mainstream activity with upper-class consumers. In all cases, even if the company makes some profits, these are too small to reinvest and scale up the project.

Furthermore, the heterogeneity of the Base of the Pyramid is such that the reflection and innovation efforts have to be done case by case to adapt the model to the local cultural context. For instance, Lafarge realized that the needs of the inhabitants in terms of housing were very different from one Indonesian region to another… In this sense, the efforts of “social engineering”, understanding the needs of the consumers and convincing them of the benefits of the products (most people in Indian villages are not aware of the benefits of wearing glasses, for instance) are very costly and will have to be undertaken in all regions.

Thus, in our view, excessive optimism regarding those concepts should be dampened: the idea of helping the poorest with a market-based approach is appealing but limited. The arrival of multinational companies in the rural or suburban regions is still good news, if it gives birth to new forms of organizations. For instance, bringing the initial capital of a company dedicated to social impact would probably be a good use for the funds lent by aid agencies. Another possibility is the “outsourced BOP”: the support, by big companies, of small social businesses working in the same sector. Those two possibilities are already starting to emerge.

The development actors will have to digest the arrival of multinational companies to make the idea of Prahalad and Yunus a success.

For further information on this very interesting project you can read the book on which this article is based on: “Les Grandes Entreprises et la Base de la Pyramide” (in French) By Stéphane Calpéna, Laurent Guérin and Yves Le Yaouança
What are the activities of BDE-TSE for the academic year 2011-2012:

An integration party in September 2011: this party was dedicated to integrate the new students into the TSE student community. This year, with more than 500 people gathered at Connexion-Café, the event was very successful.

A Halloween party in October 2011: this second event of the year allowed students to meet to celebrate the Halloween with several contests organized by BDE members (e.g. costume contest etc.). The party was a great success with 700 participants.

The TSE gala: It represents the main event of the year. TSE students, professors, and members of the administration are invited to this evening. The next TSE gala will take place at the opéra Bouffe, fully reserved for TSE members, on the 6th of April.

Creation of a football team: twenty students have joined the TSE team this year. Six matches per semester are organized against other universities in the region.

4L trophy: This well-known event takes place every February. It is a trip from the south of France to the south of Morocco with the old famous French car 4L. The BDE-TSE team wishes to create a tradition of winning the 4L trophy.

Organisation of several conferences: the first conference focused on the current Eurozone debt crisis and took place the 26th of November. The TSE researcher Augustin Landier presented his views on this topic. Next, Gilles Saint-Paul gave us a presentation on the correlation between the Welfare State and employment. Last but not least, James Hammitt gave a lecture about Obama's environmental policy. These conferences will be followed by many others with the attendance of researchers and CEOs.

The Toulouse Trading Challenge: that was a contest between ESC Toulouse, IAE and TSE based on an online stock exchange game. This challenge aimed to introduce students to the French stock market by applying theoretical economic models. More than 70 members of TSE took part in this challenge.

"One to One" event: this day is dedicated to the alumni members of TSE. Old friends and colleagues return back to Manufacture to meet with current students in a relaxed environment.

What's our goal:

Our first aim is to entertain and support the student life. We have a very motivated team. Around twenty elected members from all levels of education in TSE are responsible for organizing activities and represent students to our school administration.

To reach this goal, the association is financed by the participation fees paid by students and the funding received from companies – sponsors of our activities. By paying her inscription, every student becomes a member of the association for an academic year.

So if you want to devote some time and ideas to your school and its students please join us! We're really willing to welcome new members.

The BDE has now around 250 members, from more than 30 different countries.
The Creation

Established in 2010 by students of the Toulouse School of Economics, TSE Junior Etudes specializes in the provision of consultancy services to firms and research centers. The TSE Junior Etudes is entirely run by students and provides professional experience to students that will complement their theoretical studies at the Toulouse School of Economics. It also promotes the academics and professional skills of the Toulouse School of Economics students to the firms and research centers.

Our Organization

Last year, the TSE Junior Etude focused on developing a strong administrative and financial foundation to be able to provide good consultancy services to firms and research centers this year. The TSE Junior Etudes has adopted an organization that comprises an administrative team who manages current affairs and technical departments providing consultancy services to firms. The technical departments take the form of specific poles of expertise. The seven areas of expertise retained this year are: Finance, Statistics, Industrial Organization, Development economics, Environmental Economics, Support for Research, and Communication.

Our Realizations

The TSE Junior Etudes has provided throughout the year various kind of services to firms and research centers. Fourteen consultancy services have already been carried out by the TSE Junior Etudes teams and other studies are ongoing. The services provided can be broadly classified into two categories: research assistance services and economics studies. Research assistance services include data analysis and data mining, economic modeling, translation of economic articles, and article searches. The economics studies category consists of economics sector studies, financial markets studies, applied econometrics studies, and analysis of enterprise's competition strategies. The studies are undertaken by TSE students on behalf of research centers and firms.

Future Projects

Next year, the management team of the TSE Junior Etudes intends to develop professional training for the Toulouse School of Economics students in the mastering of statistical, econometric, and management software. They also want to increase the number of consultancy services provided to companies not linked with the TSE associated research centers. To achieve this goal, the TSE Junior Etudes needs more students getting involved in its activities.

How to Join Junior Etudes

There are two ways to become a member of the TSE Junior Etudes. The first way is to become a benevolent member. A benevolent member is an unpaid student who helps in the development of the team by carrying out some of the administrative and marketing activities. This status is obtained by sending a CV and a statement of purpose to the address presidence@tse-junioretudes.com. The TSE Junior Etude management team will contact you for a personalized interview and confirm your acceptance. The second alternative to get involved in the TSE Junior Etudes team is to become a paid worker. A paid worker is someone working on projects proposed by the TSE Junior Etudes management team and who receives remuneration for the services provided. Unfortunately, this second alternative is reserved for European Union citizens (Romania excluded). To become a paid worker, you simply have to submit your CV and a motivation letter to the address: presidence@tse-junioretudes.com and indicate whether you have a preference for specific departments in the association.

Do you want to have a professional experience while carrying out your studies at the Toulouse School of Economics? Do not hesitate to join the TSE Junior Etudes or to visit their website: tse-junioretudes.com !!!
When you’re a newly arrived student in M2 or DEEQA, attending seminars is a great way to broaden your horizons, discover a fascinating new line of research or stretch your own understanding of economics. Your advisor is telling you to go, your classmates are all going, and hey, that one tomorrow sounds really interesting, so you decide to head along too. But, surrounded by faculty who are posing questions and throwing comments that you could only hope to come up with yourself if you really had been reading Mas-Colell for an hour a day over the last two years, it can be pretty daunting to raise that tapping thought in your mind... “Please, can you just explain to me what delta is?” All eyes turn to you, accusing, as you try and hold the presenter’s stare, waiting for their response. Silence. A cough from the front row. Then a whisper in your ear... “It’s just the discount rate,” your neighbour gently mutters under his breath. Cheeks burning, you nod a thank you and turn back to the board, while the next half an hour passes in a blur of trying to hold your composure. Familiar? Well, we hope it’s not quite so bad, but nor is it easy to start a conversation with an economist when you are not yet a specialist in your field, and sometimes need to ask those questions that everyone else already seems to know the answers to.

The Brown Bag seminars on Thursday lunchtimes are, unlike other seminar series in Toulouse, orientated exclusively around students. Firstly, the audience is mainly students. Among your peers, we hope that your comments will flow more freely. Faculty are of course strongly encouraged to come as well, but it is our role as students to give the presenter a good audience. Secondly, the presenter is a student. This is the ideal place for you to present your first paper, to get feedback from within your own school and to share with others what you are working on. The audience gets to see what PhD research can look like; the presenter gets to practice how their PhD research should look like.

Toulouse School of Economics is also part of the ENTER network, (the European Network for Training in Economic Research), which means this opportunity is not limited to TSE alone. Students come to Toulouse from any of seven universities in Europe to present at Brown Bags: UAB Barcelona (Spain), ULB Brussels (Belgium), UCL London (United Kingdom), UCM Madrid (Spain), Mannheim (Germany), Stockholm (Sweden) and Tilburg (the Netherlands). And each year, Toulouse sends a number of students to present at these universities in return. You can stay for a short visit and a seminar, or for a longer term stay of a few months, to work with a particular professor.

The network also organises an annual Jamboree, which this year took place in Barcelona. Four students from TSE attended to present their work in the conference setting, and four other students went to be discussants. For many students, this is their first conference, or at least the first they have actively participated in. It is a training ground, a chance for you to practice presenting in conference conditions (you have very little time!) and to receive and give feedback to others. It’s also a pretty fun and intense couple of days and a chance to meet other economics students across Europe, as well as professors at other universities. Maybe one day they could be your future co-author or colleague!

ENTER and our own Brown Bag series are great opportunities for you during your time at TSE, and can help you to develop your ideas, your presenting skills, and your network. The Brown Bags allow you to present your work in a seminar in Toulouse, and develop receive feedback from our students and faculty. The ENTER network gives you the possibility of participating in an annual student conference, or visiting another university for a short or extended period during your PhD studies.

If you are interested in presenting your paper at a Brown Bag seminar, please contact us at ToulouseENTER@gmail.com to organize a date. If you are interested in visiting another university in the ENTER network, please contact us via ToulouseENTER@gmail.com, or have a look at the network’s website http://www.enter-network.org/.

We hope to see you at the next Brown Bag seminar!
Upcoming TSE Conferences and Workshops

1. **CSIO/IDEI, "11th Joint Workshop on Industrial Organization"**, May 3-4, 2012, Evanston, USA (organized by Doh-Shin Jeon)

IDEI organizes the 10th CSIO-IDEI workshop on industrial organization. The workshop takes place every year, alternatively in Northwestern University (where CSIO is located) and in Toulouse. Each institution is the leader of research on industrial organization in U.S.A. and in Europe (respectively). The main purpose of the workshop is to reinforce the relationship among researchers belonging to both institutions through presentation and discussion of articles at the research frontier and social events.

2. **Financial Econometrics Conference**, May 11-12, 2012 (organized by Nour Meddahi)


5. **Social Interactions, Identity and Wellbeing**, June 14-16, 2012 (organized by Roland Bénabou)


The objective of the conference is to discuss recent contributions in theoretical and empirical economics to the understanding of the functioning of food markets. Special attention will be given to the formal analysis of firms' market conduct, the relationships between agriculture, the food processing industry and distribution networks, and the new issues raised by health concerns.

Topics of the conference include food and health (obesity, chronic diseases and nutrition long-term effects, public policy, ...), marketing in food retailing, market conduct and market power in the food processing industry, contractual relationships in the agro-food chain, cooperatives and contracts, product quality, information, and food safety, intellectual property rights and biotechnology, GMO, performance and productivity analysis of the agro-food sector.


Louis Eeckhoudt is a leading risk economist who has made deep contributions to decision theory, modeling choice under risk, and insurance. He is a valued collaborator of several TSE researchers, including the conference organizers. In celebration of his contributions, this conference will provide a unique opportunity for invited researchers, including prominent senior contributors and rising stars, to present and discuss papers on recent developments in risk theory such as high orders of risk aversion, multivariate stochastic dominance, and non-expected utility models. TSE students are warmly invited to participate. For more information, please see the conference website.

8. **Behavioural Environmental Economics**, October 11-12, 2012 (organized by Nicolas Treich)

Environmental economists, as most researchers at LERNA at TSE, have studied for a long time the regulation of environmental externalities and the management of natural resources. But they have almost universally considered models with i) fully rational agents and ii) fully self-interested agents. These two assumptions are not realistic when dealing with environmental issues. Many people do care about the environment, and about future generations. They may feel shame or guilt when the environment is damaged. Several firms sell green products on the market, and adopt corporate social responsibility strategies. Governments may provide green certification, and attempt to nudge individuals into environmental friendly behaviour. The objective of the conference is to bring together researchers in behavioural economics, environmental economics and psychology to present and discuss their ongoing research on issues at the interface between economics, environment, psychology and public policy. A special PhD session will be organised, and TSE students are welcome to submit their paper and/or participate to this workshop.
TOULOUSE STUDENT MAGAZINE

Put down your coffee, and write to us at

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