Events

February

16th: XVIIème Rencontres Enseignants & Chercheurs organized by the Rectorat d’Aix-Marseille and IDEP Theme: Environment and Health IBD - Marseille Organized by Charles Figuières and Yves Doazan

May

17th-18th: Search and Matching (SaM) workshop Château Lafarge, Aix-en-Provence Organized by Bruno Decreuse and Eva Moreno-Galbis

23rd-24th-25th: Spring school - Environment workshop Organized by Hubert Stahn

Focus

The Origins of Happiness The Science of Well-Being over the Life Course

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What makes people happy? Why should governments care about people’s well-being? How would policy change if well-being was the main objective? The Origins of Happiness seeks to revolutionize how we think about human priorities and to promote public policy changes that are based on what really matters to people. Drawing on a uniquely comprehensive range of evidence from longitudinal data on over one hundred thousand individuals in Britain, the United States, Australia, and Germany, the authors consider the key factors that affect human well-being.

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Brian McCaig is an associate professor of economics at Wilfrid Laurier University, Canada. He holds a Ph.D. in economics from the University of Toronto and has previously worked as a lecturer at the Australian National University.

Brian’s main research fields are international trade and economic development. In particular, he is interested in how exporting and FDI affect workers, households, and firms in low-income countries. Most of his research focuses on Vietnam and previous research has analysed the impact of exporting on poverty, structural change, the movement of workers out of informal firms to formal firms, and income inequality. Current work focuses on the impact of exporting on the movement of workers out of informal firms into formal firms, microenterprise dynamics and responses to exporting, formal firm responses to exporting, and the effect of FDI jobs on human capital accumulation and migration.

Brian’s research has been published in the American Economic Review and the Journal of International Economics. He has also worked as a consultant for the International Food Policy Research Institute, the U.S. Department of Labor, and the World Bank while his research has been funded by the Growth and Labour Markets in Low Income Countries Program and the World Bank.

Brian is visiting AMSE from September 2017 to December 2017.
Interview with Fadila Caillaud, Economist at the World Bank
PhD dissertation defended at GREQAM in 2007

Fadila grew up in the Paris suburbs and defines herself as "a pure product of the French public education system". She discussed with us how her training as a macroeconomist helped her achieve her life-long ambition to explore the world and support those in need.

What is your current professional activity?

As a Program Leader for Human Development, my role is to support the delivery of strategic interventions aimed at improving human development outcomes in the five countries covered by our Regional Office: Algeria, Libya, Malta, Morocco and Tunisia. To achieve this objective, I manage our client relationships with senior members of governments, public organizations, the private sector, and CSOs and work with teams and experts on education, health, jobs and social protection to design and deliver effective strategies and programs. My training as a macroeconomist is a crucial asset in that it helps me connect the various pieces of the economic and social facets of development. I always strive to keep the big picture in mind, including what the broad macro aggregates mean for social sectors, and the other way around.

Can you describe your professional trajectory since you finished the PhD?

I prepared my PhD thesis between 2002 and 2007 (Major in Macroeconomics). Most of my thesis (entitled Gender Inequality in Education and Economic Development) focused on the long-term impact of gender inequality in education on growth, poverty and inequality. I developed various mathematical models to examine the interplay between macroeconomic and demographic dynamics and how inequality can reinforce itself across generations when there is sub-optimal investment in girls' education. I started working during the second year of my PhD, as a consultant for a team publishing an annual report on education under the umbrella of UNESCO (the Education for All Global Monitoring Report).

I then joined the World Bank as an analyst in 2008 and worked on public sector programs, mainly in West and Central Africa. I spent six years in Washington DC, during which I gained experience in designing and supporting Bank operations, with progressively more focus on education interventions and strategies. By the end of 2013, I was managing entire Bank education portfolios in countries such as Cameroon, Madagascar, Mauritius and Seychelles.

After my second child was born, my family decided to move to the field, and our next stop was Maputo, Mozambique, where we lived from 2014 to 2017. I was in charge of managing the Bank relationship with this important client, both in terms of size of the portfolio as well as strategically, Mozambique being a country well-endowed with natural resources but with very weak social indicators. My years in Maputo were extremely rewarding professionally and personally. Being in the field, close to the client, I gained a much finer understanding of how public policies are designed and implemented. It was fascinating to better understand the political economy of reforms and was the perfect complement to my technical expertise as an economist.

How do you feel about your experience of doing a PhD at GREQAM?

Although I do not rely on economic concepts at every point in my professional life, I always find myself using similar types of reasoning to those I acquired during my years as a PhD student. Macroeconomics reasoning sometimes constructs a world that doesn’t really exist, but within which this reasoning is pushed to its logical extreme for its own sake, to see where it takes us, to analyze different scenarios. This has been very useful to me, especially when the environment is very practical and very pragmatic.

My GREQAM training as a macroeconomist also served me well when I was fitting into the Education department of the World Bank. It enabled me to contribute from a macroeconomics viewpoint to the perspective being developed by microeconomics colleagues on long-term development and growth, reduction of inequalities, and financing for education. Also, having worked extensively on the management of public finance, I had an understanding of the issues involved in government administration. Moreover, my initial training as a macroeconomist made it easier to interact with colleagues in our department of Macroeconomics and Public Finance, even though I was in the Education department.

A memorable part of my GREQAM experience was the influence of my thesis director, Cecilia Garcia-Peñalosa. I was one of her first doctoral candidates, and she put a lot of effort into supervising me, generously helping me progress towards analytical rigour and become interested in the different aspects of the literature. She gave me a lot of latitude, understanding that I was attracted by the concrete world of public policy formulation. She always encouraged me and offered guidance. Being supported in that rigorous way and having that latitude were invaluable to me, both personally and professionally. I’m not sure I would have completed my thesis otherwise: I was not a born researcher and I needed to be involved in real-world issues.

Interview by Yves Doazan
This Mine is Mine! How Minerals Fuel Conflicts in Africa


The research program

Metals and minerals produced in mines are particularly important resources providing substantial financial windfalls, and this can lead to conflict. A case that recently made the headlines is the heavy fighting that broke out between the Rizeigat and Bani Hussein, two Arab tribes, over the Jebel Amer gold mine near Kabkabiya in Sudan’s North Darfur region, killing more than 800 people and displacing some 150,000 others since January 2013. Fighters from the “Sudan Liberation Army” operate their own illicit gold mine in Hashaba to the east of Jebel Amer to finance their fighting.

Surprisingly, while press reports have amply stressed the role of minerals and metals in civil conflict, until recently academic research on the topic suffered from several limitations. Most papers focused on oil and gas, and used country-level data that made identifying both causal effects and transmission channels problematic. Our paper for the first time presents a systematic analysis of the impact on local conflicts of all the main minerals across a whole continent. We go further than existing studies in that we document specific channels through which extraction leads to conflict escalation.

Paper’s contributions

We use a panel of disaggregated cells of roughly 55 kilometers times 55 kilometers (at the equator), covering 14 main minerals and the whole of Africa over the 1997-2010 period. Our empirical analysis draws on very detailed mining activity data and fine-grained data on fighting activities. The use of geo-referenced information enables causal identification: much of our analysis focuses on within-mining-area panel variations in violence caused by changes in the world price of a given main mineral produced in a given area.

Research process

Our work on this project started with a simple observation: there is a gap to fill in the literature on conflicts and resources, requiring investigation of specific resources (minerals) using geographically disaggregated data. We found and acquired new data on the location of mines in Africa, and combined this data with information on conflict events and commodity prices. The resulting analysis appears in the first part of the current paper. In the process, we realized that the richness of the various datasets allowed us to go much further and document patterns of conflict diffusion, as well as to link these patterns to indicators of rebel financing. The last part of our paper on companies’ behavior and transparency initiatives is associated with less violence.

Future research

The last part of the paper is a preliminary step toward a better understanding of how global policies might impact mining companies’ behavior locally and limit conflict risk. More work is needed on that side. Another question we plan to study is the impact of political risk on extraction. We plan to estimate how extraction speed depends on local violence, a question bearing numerous environmental and political implications.
The Wild West is Wild: The Homicide Resource Curse


The research program

An important political economy challenge in today’s economic literature is jointly examining formal and informal institutions, i.e. how rules and culture interact, even co-evolve. Mathieu and I were already co-authoring a paper about the cultural legacy of mining in the United States when Mathieu met Pauline, the author of a paper about the roots of the American culture of violence. This led to us embarking on a joint project using the interaction between American mining history and the establishment of formal institutions across space to document a conditional cultural legacy of mining history.

Paper’s contributions

This paper documents interpersonal violence as a dimension of the resource curse. We use the progressive administrative organization of American counties and the dynamics of mineral discoveries – which does not appear to depend on administrative organization of space – as a historical natural experiment in the United States. Mineral discoveries sometimes occurred before and sometimes after formal institutions were established in the county of discovery. We use both the rare historical data on interpersonal violence and contemporaneous data on reported crime to show that, in places where mineral discoveries occurred before formal institutions were established, there were and still are more homicides per capita. This pattern is not observed where mineral discoveries occurred after formal institutions were established. The evidence suggests the conditional development of violent behavior: interpersonal violence developing as a way to protect property rights in the absence of third party enforcement. Violent behaviors, such as the famous herculean fight between Dan Dority and Captain Turner in the third season of the *Deadwood* TV series, then translated into norms and persisted. Overall, our results imply that short-term and quasi-exogenous variations in the institutional environment can lead to large and persistent differences in cultural and institutional development.

Research process

Right from our first meetings, writing this paper was an intense experience. We began meeting in Paris and Geneva whenever Pauline, based in Australia at the time, was available. We then started presenting the idea and some preliminary analysis in various institutions. Next, we got down to a variety of amusing empirical tasks: for instance, copying information about historical violence from books and developing algorithm to treat the dynamics of administrative boundary changes so that we could track the administrative status of each square meter of the United States at the date when a mineral resource was discovered.

We submitted the paper a couple of years later and got a revision request. The referees turned out to be highly demanding and we completely recrafted the paper. We also spent a lot of time collecting data on gun ownership, gun magazine subscriptions or violent movie audiences. Unfortunately, these data turned to be too imperfect – mostly because of the spatial level at which they were available – to be included in the final version of the paper. However they contributed generously to our reply to the reviewers and were no doubt instrumental in the editor’s finally accepting the paper for publication.

Deadwood TV series

The show portrays the development of a community in the 1870s before and after it was officially annexed by the Dakota Territory.


Deadwood, season 3, HBO (2004-2006)

Marc Sangnier has been maître de conférences at Aix-Marseille University since 2013.

He obtained his PhD from the Paris School of Economics in 2012 and was a post-doctoral fellow at AMSE in 2012-2013.
Private Eradication of Mobile Public Bads


The research program

The management of public bad resources represents a ubiquitous challenge with real-world policy implications. Examples are numerous: infectious disease, fire, invasive species, antibacterial resistance, air pollution, noxious advertising, cyberspace viruses, and aquaculture pathogens, among many others.

Controlling these harmful factors is complicated by their mobility since they spread to surrounding areas, causing harm in other locations. Moreover, the spatial connectivity induced by the mobility of a resource influences private decisions, which collectively can have important consequences for control or eradication across the spatial domain.

This paper provides an analysis of a spatial-temporal game between property owners aiming to reduce damage to their own properties. It considers how private decisions depend on property-specific environmental features and on the behavior of other landowners.

Paper’s contributions

We develop an analytical model with an arbitrary number of spatially-distinct properties and discrete-time resource dynamics.

Our first contribution is to completely characterize the equilibrium strategy of each owner and the resulting effects on stock and control of the public bad across space. We especially show how the private trade-off between controlling the expansion of a public bad on one’s own property and eradicating it depends on the characteristics of its spread. For instance, high mobility results in lower private control, but a sufficiently large marginal dynamic cost may lead to global eradication.

Second, we also identify the social planner’s optimal control pattern across space and time. We find the intuitive result that non-cooperative property owners will provide too little control of the public bad. Going a step further, we show analytically how the extent of this externality is driven by heterogeneity and other features of the problem, and identify situations in which little is to be gained from cooperation among private owners. That is, when the marginal dynamic cost inflicted by the stock is low, neither the social planner nor the non-cooperative private property owners will engage in much control. However as the marginal dynamic cost grows, so does society's benefit from cooperation among property owners. This intuitive finding suggests that as the size of the externality grows (up to a specific limit), so does the importance of government intervention.

Our third main contribution is to completely characterize the gains from inducing cooperative behavior among non-cooperative property rights holders. Naturally, to the extent that properties are heterogeneous, the side payments required to achieve cooperation will differ across space. We derive the magnitude of these side payments as a function of damage, cost, spread, and growth.

To summarize, a key focus of our analysis is the conditions under which eradication is undertaken by decentralized owners and/or is desired by the social planner. We find that there is often consistency between these.

Research process

This paper was designed to be the last project on the road-map of my post-doctoral fellowship, and follows two previous papers on the role of the spatial dimension in natural resource management. The objective was to close this pleasant and interesting collaboration with my co-authors by turning the question around: eradication (invasive species), instead of preservation. It wound up being the second paper we published ....but that’s part of the long story of the submission and publication process!

Future research

Although this paper closes a first research program on the management of mobile resources, we are now planning to continue analyzing the influence of the spatial dimension in the design of public policies. The aim is to progressively revisit standard ways of addressing this dimension, and to tackle new issues raised by this new approach. For instance, in this paper we assume that all economic agents consider the resource as a public bad, while it could be a good for a subset of agents. One consequence is how to consider conflicts of interest between those who want to conserve the resource and those who are eradicating it. Overall, the spatial dimension entails many biological and strategic interactions, which deserve attention.
The Expected and Unexpected Benefits of Dispensing the Exact Number of Pills


The research program

European countries vary in their methods of supplying drugs, some dispensing packaged drugs (e.g. Belgium, Austria, Sweden, Italy, France), others dispensing the exact number of tablets required (the Netherlands, the UK, the Czech Republic). The healthcare system, and in particular the method of supplying antibiotics, has been shown to impact the risk of drug misuse and therefore the magnitude of bacterial resistance, one of the major threats in modern medicine. However, changing the drug delivery mode has a cost, at least in terms of human resources, making it difficult to promote without a more precise assessment of its benefits.

Paper’s contributions

This study investigates the impact of per-unit dispensing of 14 antibiotics on three outcomes likely to generate antibiotic resistance: self-medication, surplus pills being released into the environment and compliance with treatment.

We find all-round beneficial effects. First, lower quantities of antibiotics are supplied under the per-unit dispensing system. Actually, the initial packaging needed to be modified in 60% of per-unit dispensing, meaning that the packaging available in the community pharmacy did not match the prescription (or the reverse). Dispensing the exact number of pills thus reduced by 10% the number of pills supplied. This mismatch suggests a potential source of savings for the French national health care system. Second, the lower likelihood of having pills left at the end of treatment (often not recycled) may also reduce self-medication. Third, per-unit dispensing also appears to improve adherence to the antibiotic treatment.

This article is one of the first to analyse adherence to antibiotic treatment in an outpatient setting. We demonstrate that the drug dispensing process has an effect, likely “causal”, as the design of the study allows this type of inference. Reforming the dispensing method could thus have long-term positive effects on the environment, although the current study does not permit us to assess these delayed effects in a quantitative manner (ecological indicators of bacterial resistance).

Research process

Following the trend towards a standardized process in the evaluation of public policies, we advised the French Ministry of Health to implement a randomized controlled experiment to evaluate the impact of the per-unit dispensing of antibiotic treatments. A few months later, our research team (economists and biostatisticians from two Aix-Marseille University units: GREQAM and SESSSTIM) was mandated to implement this evaluation in collaboration with four Regional Health Agencies. Approval from the French ethics committee was obtained in 2014 (avis 14-185). Throughout 2015, a clustered randomized controlled trial was carried out in 100 retail pharmacies. Pharmacies were asked to recruit patients who were then interviewed by phone two to three days after completion of their treatment. In addition to questions about the dispensing mode, the 1,185 interviewed patients provided information on their habits of recycling drugs, intended self-medication and adherence to the treatment.

The randomization of the intervention ensured comparability, and thus unbiased assessment of the impact of the change in the dispensing mode. This design was coupled with an observational study of pharmacists, aimed at assessing the main professional difficulties associated with per-unit drug dispensing.

Future research

Our measurement of adherence relies on patients’ declarations, which is a limitation. It might be possible, by observing administrative data on health expenditure reimbursements, to identify the dispensing of an equivalent drug a few weeks after completion of the initial treatment, which could indicate poor compliance. Such administrative data concerning our sample have not been obtained yet. This could be the opportunity to cross-validate the result obtained on adherence. Note that a companion paper published in the European Journal of Public Health already validates the correlation between the two adherence-measuring tools, the adherence scale metrics (Morisky scale) and the pill-counting method, for improved monitoring of antibiotics adherence.

We recognize that the results of an experiment based on 100 voluntary pharmacies cannot automatically be generalized to the 26,000 community pharmacies of France. This study actually provided an opportunity to grasp the general weaknesses associated with small-scale randomized experiments. Possible individual adaptations and new practices, occurring only in the long run, were not taken into account. A real issue is how the drug industry can adapt: pharmaceutical companies can strongly facilitate the new dispensing mode by making appropriate changes to the supply-chain. A new wave of experiments, at a larger scale and with more contextual adjustments, would then be needed for a full assessment of the reform.

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Bruno Ventelou

Bruno Ventelou joined GREQAM as a CNRS directeur de recherche in 2005. He obtained his PhD in 1995 at EHESS Paris. He taught at ENS Cachan between 1994 and 1998 and was a researcher at FNSP (OFCE Paris) between 1998 and 2003.
Four Decades of Research on Gender Gaps

Although gender studies has been a major discipline in the social sciences since the 1950s, economists were slow to address gender differences. With some exceptions, such as Jacob Mincer's work on female labor force participation (Mincer, 1962), it was not until the mid-1970s that gender started to be considered a major research field in economics. Two approaches emerged. On the one hand, Mincer and Solomon Polachek's analysis of family investments in human capital (Mincer and Polachek, 1974) and Gary Becker's “A treatise on the family” (Becker, 1981) applied the tools of micro-economics to the analysis of decisions within the household. On the other, labor economists started examining how to describe the data, with the pioneering work of Ron Oaxaca (Oaxaca, 1973) providing a way of “measuring” gender wage gaps. The problem with the early literature was that it was ideologically charged: feminist economists, such as Ester Boserup, saw gender as a social construct, neo-classical economics praised the advantages of the division of labor within the household. These two literatures had difficulty finding a common ground, the central debate being the role of preferences. Are differences in gender preferences a “parameter” of the economy that we should take as given, or are there “deep causes” of such differences that we should seek to explain?

The result of this conflict was that for several decades, mainstream gender economics remained largely descriptive, the clearest example being the hundreds of papers that decompose gender wage gaps into an “explained part” due to differences in education or occupation between men and women and an “unexplained part” often attributed to discrimination. The turn of the century has seen a renewed interest in gender in economics and a number of research questions have appeared. On the one hand, economists have sought to understand the consequences of gender gaps, in particular in developing countries, and a growing literature has argued that female empowerment is beneficial not only for women but also for aggregate economic development (Duflo, 2012). On the other, recent work has examined differences in preferences across the sexes using experimental evidence to identify male and female traits that can affect behavior, such as women being more averse to risk or disliking competition; see Azmat and Petrongolo (2014) for a review.

Three crucial questions remain. The first concerns the traditional approach followed by labour economists. The decompositions that are performed to explain gender earnings gaps take both an individual's occupation and industry as given, and the rewards to each job as pre-determined. Yet occupations are the individual’s choice, and we need to go further in order to understand why women choose certain occupations or why the occupations that are female-dominated pay less than those where men are predominant. As Claudia Goldin claims (Goldin, 2014), the market seems to disproportionally reward jobs that are associated with long hours and permanent availability. This raises the question of whether such practices are really required by the technology of the jobs, or whether a “social norm” surrounds these occupations, which happen to be male-dominated.

The second question we need to address is the role and origin of individual preferences. Experimental evidence indicates, for example, that women dislike negotiation, have lower preferences for risk than men, and are more likely to avoid competition, and these differences could explain labour market outcomes. However, it is unclear to what extent we can extrapolate these behaviours to situations outside the lab, and we need to find ways to test to what extent these feature are observed in real labour markets. Open questions also remain as to the source of gender preferences: are they due to nature or to nurture? Evidence from the World Value Survey indicates that both women’s and men’s attitudes towards female employment and the household division of labour are crucially shaped by their own mothers’ experiences; Fernández, Fogli, and Olivetti (2004). More work along these lines is essential if we want to understand the extent to which women’s career preferences are a social construct.

A last area of research concerns the relationship between gender and economic performance in developing countries. A key argument put forward is the greater altruism and long-run vision of women: increase a father’s salary and he’ll drink it away, increase his wife’s earnings and school books or food will be bought (Kennedy and Peters, 1992). It seems rather simplistic to maintain that in these countries, women are rational, forward-looking, and maximize household utility, while men are not. Hence, just as we need to understand to what extent female preferences in rich economies are a social construct, we should ask ourselves what is behind the results for developing countries. Are men really not capable of understanding the importance of nutrition and schooling for their offspring’s wellbeing? Or do they face social norms and peer pressure that result in suboptimal decisions?

References
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Cecilia Garcia Peñalosa

Cecilia Garcia Peñalosa has been a CNRS directrice de recherche at GREQAM-AMSE since 2005. She obtained her PhD in 1995 from Oxford University. She was lecturer at Universitat Autonoma de Barcelona in 1995-1996, research fellow at Oxford in 1996-1999 and joined GREQAM in 1999. Her fields of interests are economic growth and development, income inequality, and gender in labour markets.