## Sébastien Massoni

Paris School of Economics University of Paris 1 Panthéon Sorbonne Centre d'Economie de la Sorbonne - Office 402 106-112 Bd de l'Hôpital, 75647 Paris cedex 13, France http://samm.univ-paris1.fr/Sebastien-Massoni Updated: November 14, 2012 Citizenship: French +33 1 44 07 82 06 / +33 6 45 27 78 20 sebastien.massoni@gmail.com

#### **EDUCATION**

**Ph.D.** in Economics,

(expected) May 2013

Paris School of Economics - University of Paris 1

Dissertation: "Formation and Elicitation of Subjective Beliefs"

Advisor: J.-C. Vergnaud

M.A. in Economics, Paris School of Economics - University of Paris 1 2009

**B.A.** in Economics, Paris School of Economics - University of Paris 1 2007

**B.A.** in Economics and Sociology, University of Paris X Nanterre 2006

RESEARCH INTERESTS **Primary:** Experimental and Behavioral Economics

Secondary: Decision Theory, Cognitive Sciences, Applied Public Economics, Cluster-

ing and Classification

**PUBLICATIONS** 

Integration-Segregation Decisions under General Value Functions: "Create your own Bundle - Choose 1, 2, or all 3!", with M. Egozcue, W.-K. Wong, R. Zitikis, *IMA Journal of Management Mathematics* (in press).

How to Improve Pupils Literacy? A Cost-Effectiveness Analysis of a French Educational Project, with J.-C. Vergnaud, *Economics of Education Review*, 31(1):84-91, 2012.

Impact of Information on Intentions to Vaccinate in a Potential Epidemic: Swine-origin Influenza A(H1N1), with O. Chanel, S. Luchini, J.-C. Vergnaud, *Social Science & Medicine*, 72(2):142-148, 2011.

Apprendre à bien lire: une étude coût-efficacité des Actions Lecture, with M. Hainaut, J.-C. Vergnaud, Revue d'Economie Politique, 120(5):823-843, 2010.

Career-Path Analysis Using Optimal Matching and Self-Organizing Maps, with M. Olteanu, P. Rousset, in *Advances in Self-Organizing Maps*, J. Principe, R. Miikkulainen (Ed.), Lecture Notes in Computer Science, Springer Berlin / Heidelberg, 154-162, 2009.

## WORKING PAPER Job Market Paper:

# Elicitation of Subjective Probabilities in the Light of Signal Detection Theory, with T. Gajdos, J.-C. Vergnaud

Most theories of decision under uncertainty are based on the idea that individuals weight events by some (transformation of) subjective probabilities. Elicitation of these subjective probabilities has thus became a major concern for evaluating and applying these models. In order to do so, one needs (i) to be sure that such subjective probabilities actually exist in individuals' minds and (ii) to be able to infer these subjective probabilities from behavioral data. It is know from cognitive science that decisions in

perceptive tasks are based on probabilities encoded at the neuronal level. Moreover, Signal Detection Theory (SDT) provides a theoretical model, confirmed by experimental neuronal data, that relates these probabilities to behavioral data. We use three different elicitation rules to measure individuals' confidence in a perceptive task, and compare the results with the theoretical predictions based on SDT. We find that subjective probabilities elicited by a specific rule, the Matching Probabilities, fit very well the theoretical predictions. We also show that these results are consistent with those obtained for the same subjects in a non-perceptive task (knowledge and logic quiz). This paves the way for extending our findings to non-perceptive tasks.

## Other Papers:

Optimal Group Decision: A Matter of Confidence Calibration, with N. Roux.

Subjective Beliefs Formation and Elicitation Rules: Experimental Evidence, with G. Hollard, J.-C. Vergnaud (under revision in *Management Science*).

Identify Labor Market Trajectories by Drifting Markov Models and Self-Organizing Maps Algorithms, with M. Olteanu.

Decision and Beliefs on the Insurance Market in Presence of Risk, Ambiguity and Conflict, with T. Dupont-Courtade.

## WORKS IN PROGRESS

An Experimental Approach of Health Insurance Demand, with T. Gajdos, H. Huber, J.-C. Vergnaud.

Anticipation and PTSD in a Natural Disaster Framework: A Field Experiment on Flood Risk in South of France, with O. Chanel, J.-C. Vergnaud.

Backward and Forward Metacognition, with S. Flemming, T. Gajdos, J.-C. Vergnaud.

Contextual Choices and Metacognition: An Exploration through Numerosity Comparisons under Stereotype Threat, with T. Gajdos, T. Schmader, J.-C. Vergnaud.

Insurance, Beliefs and Affects: Using Psychophysic Paradigm to Explore Insurance Behaviors Facing Catastrophic Risk, with O. Chanel, J.-C. Vergnaud

## **EXPERIENCE**

### Associate Member,

Since 2009

SAMM (Statistics, Analysis, Multidisciplinary Modelization), University of Paris 1

**Teaching Assistant**, University of Paris 1

2009-2013

Microeconomics (B.S.), Probability (B.A.), Statistics (B.A.), Linear Algebra (B.A.)

**Research Assistant**, Univ. of Paris 1 - Ministry of National Education 2007–2008 in Economics of Education , J.-C. Vergnaud

Intern, University of Paris 1

in Applied Mathematics, M. Olteanu

2008

in Experimental Economics, M. Cohen, J.-M. Tallon, J.-C. Vergnaud

2007

## REFEREE

 $\label{lem:eq:constraint} Educational\ Research,\ Herald\ Journal\ of\ Marketing\ and\ Business\ Management,\ Revue\ d'Economie\ Politique$ 

GRANTS APO CREMCO. 2012 - 2014

> Beliefs, emotions and behaviors, directed by T. Gajdos Région Provence Alpes Côte d'Azur (40 000 €).

#### ANR RISKEMOTION,

2009 - 2012

Decision under risk and emotion for natural disasters, directed by O. Chanel French Ministry of Research (88 000  $\in$ ).

ANR CONTROL, 2007-2010

The feeling of control: A multi-disciplinary approach, directed by J.-M. Tallon French Ministry of Research (200 000 €).

PRESENTATIONS 2012: EMPG 2012 (Pamplona), ESA 2012 (New-York), AFOSR Workshop on Catastrophic Risk (Stanford), Econometric Society at ASSA Meeting (Chicago)

> 2011: Dauphine Workshop on Economic Theory (Paris), NordicExpe'11 (Lund), Trajectories'11 Workshop (Paris), EMPG 2011 (Paris), ESA 2011 (Chicago), ASFEE 2011 (Schoelcher)

> 2010: NeuroComp (Lyon), SABE 2010 (San Diego), ESA 2010 (Copenhagen), FUR XIV (Newcastle), VII LabSi Workshop (Siena)

2009: ESE Conference (Rotterdam), MASHS'09 (Toulouse)

MATLAB, R, STATA, LATEX Computer: SKILLS

Languages: French (native), English (fluent), German (basic)

REFERENCES

Jean-Christophe Vergnaud (Ph.D. advisor) Senior Researcher CNRS, University of Paris 1, CES, 106-112 Bd de l'Hôpital, 75647 Paris

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Senior Researcher CNRS, GREOAM and IDEP Marseille.

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