

# Antoine Arnoud

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Yale University

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## Education

- 2013 - present **PhD. in Economics candidate, Yale University**  
Fields: Public Finance, Macroeconomics, Labor Economics
- 2013 **M.S. in Economics (APE), Paris School of Economics**  
Visiting Scholar, U.C. Berkeley (2013)  
Alliance Program Visiting Scholar, Columbia University (Summer 2012)
- 2010 **M.Eng. in Mechanical Engineering, Tsinghua University, China**
- 2008 **Diplome d'Ingenieur, Ecole Polytechnique, France**

## Research in progress

### Automation Threat and Wage Bargaining

*This paper analyzes the impact of automation technologies on the US labor market. I show that automation technologies impacts wages even in the absence of adoption. The mere possibility to automate increases a firm's outside option in the wage bargaining and results in lower wages for workers. The effect propagates to all wages in the labor market through the outside option of the workers.*

### Data Matching With Optimal Transport Algorithm

*This paper develops a new method to statistically match data from the same representative population and apply the method to income data. The paper shows that the choice of the matching method impacts the measure of income inequality.*

### Benchmarking Global Optimizers

with F. Guvenen and T. Kleineberg

*This papers compares different algorithms commonly used for global optimization in economics.*

## **The Sunk Cost effect: Theory and Empirical Evidence**

Master's thesis, Paris School of Economics, 2013. Supervisor: J. Pouyet

*This paper builds a dynamic inter-temporal model of consumption for durable good incorporating the sunk cost effect. The sunk cost effect impacts consumption via two channels: the amount spent for the purchase of the good and the time span since the payment. The model considers agents partially naive about the sunk cost effect: they anticipate its impact via the monetary channel, but not its evolution over time. The model predicts a non-negative probability of flat rate bias, an increase of consumption with the amount paid, and a diminishing consumption over time. The theory is confronted to a new dataset containing contractual choices and attendance records from 21 health clubs for more than 69,405 individuals. The analysis reveals that (1) more than 60% of the individuals suffer from flat rate bias and forego savings of 353 Euro during their membership on average; (2) the amount spent for membership increases gym attendance rate; and (3) gym attendance rate decreases with the time span since last payment. Whereas these findings cannot be simultaneously explained by competing theories, they are all predicted by the model developed in this paper.*

## **Teaching**

- 2016 **Introductory Macroeconomics**, Teaching Assistant  
Instructor: Professor A. Tsyvinski
- 2015 **Intermediate Macroeconomics**, Teaching Assistant  
Instructor: Professor M. Peters
- 2015 **Introductory Macroeconomics**, Teaching Assistant  
Instructor: Professor A. Tsyvinski
- 2014 **Debates in Macroeconomics**, Teaching Assistant  
Instructors: Professor A. Tsyvinski and Professor S. Roach

## **Academic Honors**

- 2014 - 2015 **Yale, Charles V. Hickox Fellowship Fund**
- 2013 - 2014 **Yale, Cowles Foundation and Economic Growth Center Fellowship**
- 2012 **American Foundation for PSE Scholarship** (6 months)
- 2008 - 2010 **The Distinguished International Students Scholarship**  
Two-year full scholarship, awarded by the Chinese Scholarship Council
- 2008 - 2010 **Master's Degree Scholarship**  
Two-year scholarship co-awarded by Fondation de l'Ecole Polytechnique and Veolia Water
- 2009 **SA Art & Sport Gold Medal**  
Medal awarded for outstanding contributions in student sport activities by the Administrative Vice Dean of Tsinghua University (China)
- 2008 **Outstanding Leadership Award**  
Exceptional student in campus & leadership activities, awarded by the Head of Ecole Polytechnique

## **Professional Activities**

- Referee Activity: Journal of the European Economic Association
- Conferences: Organizer: Globalization, Inequalities and the Crisis in Economics  
(Institute for New Economic Thinking - Young Scholars Initiative Conference)

## Computer Skills

Languages: VBA, java, C++, Fortran, R, Python, L<sup>A</sup>T<sub>E</sub>X  
Softwares: Stata, Matlab, Solidworks, Fluent, Infoworks

## Languages

French (native) English (fluent) German (advanced) Chinese (advanced) Korean (basics)