

# Karine Constant

Université Paris Est Créteil  
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Birth date : 5 août 1987  
Citizenship : French

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## Current position

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2016-      **Associate professor**  
ÉRUDITE - Université Paris Est Créteil

## Research fields

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**Main :** Environmental economics, Macroeconomics.

**Details :** Public policy, Growth, Inequality, Education, Health, Population, International trade.

## Education

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2015      **PhD in Economics** *with highest honors*  
GREQAM, Aix-Marseille School of Economics, Aix-Marseille Université  
*Environment and Growth : Essays on Some Implications of Households' Altruistic Choices*  
Jury : Alain Ayong Le Kama (Chairman), Mouez Fodha (Referee), Carine Nourry (Advisor),  
Fabien Prieur (Referee), Thomas Seegmuller (Advisor)

## Research papers

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**Publications :**    **Environmental Policy and Human Capital Inequality : A Matter of Life and Death**, forthcoming  
in the **Journal of Environmental Economics and Management**.

This paper analyzes the economic implications of an environmental policy when we account for the life expectancy of heterogeneous agents. In a framework in which everyone suffers from pollution but health status also depends on individual human capital, we find that the economy may be stuck in a trap in which inequality rises steadily, especially when the initial pollution intensity of production is too high. We emphasize that such inequality is in the long run costly for the economy in terms of health and growth. Therefore, we study whether a tax on pollution associated with an investment in pollution abatement can be used to address this situation. We show that a stricter environmental policy may allow the economy to escape from the inequality trap while enhancing the long-term growth rate when the initial inequality in human capital inequality is not too large.

**Environmental Policy and Growth when Environmental Awareness is Endogenous**, with M.  
Davin, forthcoming in **Macroeconomic Dynamics**.

This paper examines the relationship between environmental policy and growth when green preferences are endogenously determined by education and pollution. We consider an environmental policy in which the government implements a tax on pollution and recycles the revenue to fund pollution abatement and/or an education subsidy (influencing green behaviors). When the sensitivity of agents' environmental preferences to pollution and human capital is high, the economy can converge to a balanced growth path equilibrium with damped oscillations. We show that this environmental policy can both remove these oscillations, associated with intergenerational inequalities, and enhance the long-term growth rate. However, this solution requires that the revenue from the tax rate must be allocated to education and direct environmental protection simultaneously. We demonstrate that this type of mixed-instrument environment policy is an effective way to address environmental and economic issues in both the short and the long run.

**Environmental Quality, Growth and Inequalities : the Specific Role of Health**, with N. Raffin,  
*Revue Française d'Économie*, XXXI (3), 9-29, 2016 (in french).

In this article, we pay special attention to the mutual interactions between environmental quality, the growth process and inequalities going through the channel of health. Our objective is to shed light on the feasibility of a sustainable development in the long run by identifying the main mechanisms linking the economic, environmental and social dimensions. Finally, we highlight the major role played by environmental policies in improving the economic performance and addressing inequalities.

**Population Growth in Polluting Industrialization**, with C. Nourry and T. Seegmuller, *Resource and Energy Economics*, 36(1), 229-247, January 2014.

Recently, many contributions have focused on the relationship between capital level, growth and population dynamics, introducing fertility choice in macro-dynamic models. In this paper, we go one step further highlighting also the link with pollution. We develop a simple overlapping generations model with paternalistic altruism according to wealth and environmental concerns. One can therefore explain a simultaneous increase in capital intensity, population growth and pollution, namely a polluting industrialization. We show in addition that a permanent productivity shock, possibly associated to technological innovations, promotes such a polluting development process, escaping a trap where the economy is relegated to low levels of capital intensity, population growth and pollution.

**Working papers : Unequal Vulnerability to Climate Change and the Transmission of Adverse Effects through International Trade**, with M. Davin, FAERE Working Papers 2018, submitted.

In this paper, we consider the unequal distribution of climate change damages in the world and we examine how the underlying costs can spread from a vulnerable to a non-vulnerable country through international trade. To focus on such indirect effects, we treat this topic in a North-South trade overlapping generations model in which the South is vulnerable to the damages entailed by global pollution while the North is not. We show that the impact of climate change in the South can be a source of welfare loss for northern consumers, in both the short and the long run. In the long run, an increase in the South's vulnerability can reduce the welfare in the North economy even in the case in which it improves its terms of trade. In the short run, the South's vulnerability can also represent a source of intergenerational inequity in the North. Therefore, we emphasize the strong economic incentives for non-vulnerable - and a fortiori less-vulnerable - economies to reduce the climate change damages on - more - vulnerable countries.

## Conferences and seminars

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### Conferences :

**Workshop Environmental Regulation, International Trade and Innovation** (2018, Université Paris Est Créteil)

**Workshop on Growth, the Environment and Population** (2017, Université Paris Nanterre)

**Conference of the French Association of Environmental and Resources Economists - FAERE** (2017, Nancy ; 2015, Toulouse Business School ; 2014, Université Montpellier 1)

**Workshop on Location Choices and Environmental Economics** (2017, Université de Pau et des Pays de l'Adour)

**Conference of the European Association of Environmental and Resources Economists - EAERE** (2016, ETH Zurich)

**Conference on Sustainable Resource Use and Economic Dynamics - SURED** (2016, Université Paris 1 ; 2014, ETH Zurich)

**5th Thematic Workshop of the French Association of Environmental and Resources Economists - FAERE** Université Rennes 1 (2016)

**Theory and Methods in Macroeconomics** (2016, Banque de France ; 2011, HEC Montreal)  
**Public Economic Theory** (2015, University of Luxembourg ; 2013, Catholica-Lisbon University)  
**Journées d'Economie Publique Louis-André Gérard-Varet** Aix-Marseille Université (2013, 2012)  
**Instability and public policies in a globalized world : Conference in honor of Jean-Michel Grandmont** Aix-Marseille Université (2013)  
**Overlapping Generations Days** (2013, Université d'Auvergne ; 2012, Aix-Marseille Université ; 2011, Université Catholique de Louvain)  
**New Challenges for Macroeconomic Regulation : Financial Crisis, Stabilization Policy and Sustainable Development** Aix-Marseille Université (2011)  
**Rencontres de l'Environnement** (2010, Université Montpellier I)

#### Seminars :

**Seminar of ERUDITE** - Université Paris Est Créteil (2016)  
**Environmental and resource economics seminar of LAMETA INRA** - Université de Montpellier (2016)  
**Economics seminar of LEMNA** - Université de Nantes (2016)  
**Seminar of UMR Économie Publique INRA** - AgroParisTech (2016)  
**Seminar of Institut du Développement et de la Prospective** Université de Valenciennes (2016)  
**Lunch seminar of EconomiX** Université Paris Ouest Nanterre la Défense (2016)  
**Environmental and resource economics lunch seminar of Paris School of Economics** Université Paris 1 (2016)  
**Environmental and resource economics seminar of EconomiX** Université Paris Ouest Nanterre la Défense (2015 ; 2014)  
**PhD seminar of Aix-Marseille School of Economics** Aix-Marseille Université (2014 ; 2010)

## Teaching experience

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#### Lectures and tutorials, Université Paris Est Créteil

2016- **Economic policy analysis** - second year undergraduates *Licence langues étrangères appliquées*  
 2016- **International economics** - third year undergraduates *Licence langues étrangères appliquées*  
 2016 **Conference "Environment, Growth and Inequality"** - *Classe préparatoire aux grandes écoles*

#### Tutorials, Université Paris Ouest Nanterre la Défense

2014-2015 **Macroeconomics** - first year undergraduates *Licence administration économique et sociale*  
 2014-2015 **Microeconomics** - second year undergraduates *Licence administration économique et sociale*

#### Tutorials, Aix-Marseille Université

2011-2014 **Statistics** - first and second year undergraduates *Licence économie et management*  
 2011-2014 **Probability** - second year undergraduates *Licence économie et management*  
 2012-2013 **Mathematics** - first year undergraduates *Licence administration économique et sociale*  
 2010-2012 **Macroeconomics** - first and second year undergraduates *Licence économie et management*

## Former positions

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2015-2016 **Post-doctoral research fellow**, *EconomiX* - Université Paris Ouest Nanterre la Défense  
 2014-2015 **Research and teaching assistant (ATER)**, Université Paris Ouest Nanterre la Défense  
 2013-2014 **Research and teaching assistant (ATER)**, Aix Marseille Université  
 2010-2013 **Teaching Assistant**, Aix Marseille Université  
 2010-2013 **Doctoral Grant**, French Ministry of Research

## Scientific and administrative responsibilities

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- 2017-2018 Member of the recruitment committee of an assistant professor  
*ERUDITE, Université Paris Est Créteil*
- 2016-2017 Member of the recruitment committee of an assistant professor  
*EconomiX, Université Paris Ouest Nanterre la Défense*
- 2015-2016 Co-organizer of the environmental and resource economics seminar of EconomiX  
*Université Paris Ouest Nanterre la Défense*
- 2011-2014 Member of the doctoral school board (students delegate),  
*ED 372 Economics and Management - Aix-Marseille*
- 2011-2014 Member of the GREQAM research center board (students delegate),  
*Groupement de Recherche en Économie Quantitative d'Aix-Marseille, UMR 6579*

## Referee activities

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Environmental and Resource Economics, Economics Bulletin

## Languages and computer skills

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Languages : French (native), English (fluent)

Softwares : Latex, Mathematica, RATS, SAS, VBA, Stata