Thomas Thivillon

Bordeaux School of Economics
University of Bordeaux
16 avenue Léon Duguit
Bât. H2, CS50057
33608 Pessac CEDEX, France
Citizenship: French

✉ : thomas.thivillon@u-bordeaux.fr
☎ : +33(0)6 10 48 24 98
www.thomasthivillon.com

Research fields:

Development Economics, Environmental Economics, Health Economics.

CURRENT POSITION

2023-2025	**Post-doctoral researcher**, Bordeaux School of Economics (since May 2023)

EDUCATION

Feb. 2023	Qualified for assitant professor positions in economics by the French Ministry of Research (CNU Section 05 – Qualification number : 23205389201).
2017-2022	PhD in Economics, PSL University – Paris Dauphine University Dissertation: *Essays on Household Production, Human Capital and the Environment in Developing Countries* Supervisor: Philippe De Vreyer (Dauphine – PSL) Dissertation Committee: Tanguy Bernard (U. of Bordeaux), Michael Grimm (U. of Passau), Elise Huillery (Dauphine – PSL), Sylvie Lambert (Paris School of Economics)
2007-2008	MSc in Sustainable Development, HEC Paris
2004-2005	MSc in Comparative Politics, London School of Economics
2000-2004	BSc in Social Sciences, Sciences Po Grenoble – Université Grenoble Alpes

REFERENCES

Philippe De Vreyer
Professor of Economics
PSL - Université Paris-Dauphine
Place du Maréchal de Lattre de Tassigny
75016 Paris, France
philippe.devreyer@dauphine.psl.eu

Michael Grimm
Professor of Development Economics
University of Passau
Innstrasse 29
94032 Passau, Germany
michael.grimm@uni-passau.de

Flore Gubert
Senior Research Fellow
Institut de Recherche pour le Développement
4 rue d'Enghien
75010 Paris, France
gubert@dial.prd.fr

Elise Huillery
Professor of Economics
PSL - Université Paris-Dauphine
Place du Maréchal de Lattre de Tassigny
75016 Paris, France
elise.huillery@dauphine.psl.eu

JOB MARKET PAPER

Saving lives with cooking gas? Unintended effects of targeted LPG subsidies in Peru [PDF]

JOB MARKET PAPER - Program Chair Award in Climate/Pollution/Environment and Health, ASHEcon 2023.

I study a nationwide gas stove program which aims to convert Peruvian households from wood-fuel cooking to liquefied petroleum gas (LPG) cooking. Using 16 waves of Peru's Demographic and Health Survey, I show that infant mortality increases by 15\% on average as a result of the intervention. Subsidizing LPG also causes a higher incidence of symptoms of acute respiratory infections in under-5 children and of moderate or severe anemia among adult women. I provide suggestive evidence that these health impacts are due to an increase in total exposure to air pollutants and to unanticipated behavioral effects of the intervention.

WORKING PAPERS

Demand for informal caregiving and human capital accumulation: Evidence from elderly deaths in Senegal

Women carry a disproportionate share of the burden of informal caregiving to functionally dependent relatives such as old age individuals. In developing economies, this burden tends to fall on the shoulders of female adolescents in particular for cultural and economic reasons. This paper uses original panel data from Senegal to evaluate the effect of co-residence with elderly individuals on the educational attainment of female children. To identify this effect, I exploit the deaths of elderly co-residents which occur during the study period in an empirical strategy which relies on triple-differences with child fixed-effects. I show that an event of elderly death is associated with 23% additional education completed over a period of 4 years by affected girls. I present evidence that changes in demand for informal caregiving within the household are one of the mechanisms at play. These results call for increased attention to specific forms of domestic child labor in public policies in order to reduce gender inequalities in education.

Wood fuel usage, air pollution and the prevalence of COVID-19 in Burkina Faso (with Philippe De Vreyer, Elodie Djemaï, Adama Sana, Dramane Kania, Hermann Badolo and Abdramane Berthé)

Air pollution leads to higher transmission rates of some infectious diseases whose pathogens may be borne by particulate matter. This is a source of concern for public health in countries where wood fuel is the main source of cooking energy because wood combustion emits high levels of fine particulate matter ($PM_{2.5}$). This paper identifies the effect of individual exposure to $PM_{2.5}$ on the probability of being infected by the SARS-CoV-2 virus during the first peak of the COVID-19 epidemic in Burkina Faso. We instrument for exposure to $PM_{2.5}$ using a distance weighted average of wood consumption among households in the neighborhood of the individual of interest. We find that 12% of adults tested positive to SARS-CoV-2 antibodies in our study area in June 2021. Exposure to $PM_{2.5}$ from wood fuel combustion significantly increases the risk of COVID-19. At the estimated mean 24-hour exposure of 219 µg/m^3, our results predict a 7.6 percentage points increase in the probability of contracting the virus compared to a scenario without pollution. Converting households from wood to less polluting sources of energy may have benefits in terms of reduced coronavirus transmission.

WORK IN PROGRESS

REDGAS: A randomized evaluation of the demand for LPG stoves and of the associated effects on household air pollution, greenhouse gas emissions and well-being in Burkina Faso (with Philippe De Vreyer and Elodie Djemaï)

[Data collection completed]

We evaluate an intervention aimed at reducing air pollution in Burkina Faso by encouraging households to switch from wood or charcoal to liquefied petroleum gas (LPG) as their main cooking fuel. We randomize 820 households to a subsidy treatment, a credit treatment and a control group. Treated households receive an offer to purchase a gas stove from a local retailer at a discounted price or at the market price with the option to pay in three installments. We estimate the effects of these capital costs subsidies and consumption loans on the adoption and intensity of use of LPG over a six-month period following treatment. We also generate estimates of the effects of the interventions on 24-hour individual exposure to fine particulate matters ($PM_{2.5}$).

Poverty, preventive actions and the progression of COVID-19 in Burkina Faso (with Philippe De Vreyer, Elodie Djemaï, Hermann Badolo, Abdramane Berthé, Dramane Kania and Adama Sana)

[Data collection completed]

This project investigates the determinants of COVID-19 transmission in Burkina Faso with a focus on behavioural factors. We conduct a randomized experiment in which an information treatment aimed at addressing informational market failures is cross-randomized with unconditional cash transfers designed to incentivize households to adopt preventive actions (regular handwashing, wearing face masks, etc). Rapid COVID-19 serological tests are conducted in all adult individuals belonging to the sample before and after the intervention. We estimate the effect of access to information and cash transfers on serological status at endline.

PAST PROFESSIONAL EXPERIENCE

2017 – 2022   CIFRE Researcher, Microfinance Solidaire SAS, Paris.
2012 – 2017   Head of Access to Energy Unit, Entrepreneurs du Monde, Paris.
2010 – 2012   Project Manager – Access to Energy and SMEs, Entrepreneurs du Monde, Paris.
2008 – 2010   Project Manager, Kantar Added Value – Sustainable Development Practice, Paris.
2006 – 2007   Project Officer, France Volontaires, Port-au-Prince, Haïti.

TEACHING EXPERIENCE

2022-2023   Master's thesis supervision, MSc in Development Economics, Université Paris 1 Panthéon – Sorbonne (Manon Bellot).

2021-   Lecturer, Université Paris 1 Panthéon – Sorbonne (Graduate level, in English).
    "Microcredit, Financial Inclusion and Development"

2016-2019   Lecturer, Sciences Po - Paris School of International Affairs (Graduate level, in English).
    "Access to Energy in Developing Countries"

PROFESSIONAL SERVICES

Referee: Journal of Development Studies, Fund for Innovation in Development (FID).

Co-organiser, DIAL seminar in development economics (IRD – Université Paris-Dauphine), 2018-2019.

Member of the Scientific Committee - APIMAMA Kids Project (University of Bordeaux – Félix Houphouët-Boigny University Abidjan), since 2023.

CONFERENCES AND SEMINAR PRESENTATIONS

2023	ADRES (Paris, France), CSAE (Oxford, UK); Paris 1 Panthéon Sorbonne University; Midwest International Economic Development Conference (Houston, USA - declined), 1st Welfare and Policy conference (Bordeaux, France), 12th annual conference of the American Society of Health Economists (ASHEcon 2023, St Louis, Missouri, USA), Congress of the French Economic Association (AFSE, Paris, France), International Conference on Development Economics – AFEDEV (Paris, France).
2022	ADRES (Paris, France - online); Departmental seminar, Dauphine – PSL (Paris, France); ENSAE Dakar (online); Stockholm School of Economics.
2021	NCDE conference (Bergen, Norway - online); ICDE conference (Bordeaux France - online); Journées de Microéconomie Appliquée (Chambéry, France - online).
2020	Journées doctorales du Développement (Paris, France - online).

GRANTS AND SCHOLARSHIPS

2023	*Program Chair Award* in Climate, Pollution, Environmental and health, ASHEcon 2023.	
2023	AFD - PAIRES Program, "*Impact of agricultural microcredit on the livelihood of small farmers in Guinea – Feasibiliy assessment*", co-PI with Al-Mouksit Akim (Mohammed VI U.), Joachim Jarreau (Dauphine-PSL), Camille Saint-Macary (IRD), Baptiste Venet (Dauphine-PSL).	EUR 18,900
2022	Inserm – ANRS, "*COVID4P: An investigation of the relationship between poverty, pollution, preventive actions and the progression of CoViD-19 in Burkina Faso*", co-PI with Adama Sana (Centre Muraz), Philippe De Vreyer (Dauphine-PSL), Hermann Badolo (Centre Muraz), Abdramane Berthé (Centre Muraz), Elodie Djemaï (Dauphine-PSL) and Dramane Kania (Centre Muraz).	EUR 397,280
2020	AFD - PAIRES Program, "*REDGAS: A randomized evaluation of the demand for LPG stoves and of the associated effects on household air pollution, greenhouse gas emissions and well-being in Burkina Faso*", co-PI with Philippe De Vreyer and Elodie Djemaï.	EUR 380,000
2017	CIFRE PhD Scholarship (4 years)	

LANGUAGES

French (native), English (fluent), Haitian Creole (fluent), Spanish (can read), German (can read).

COMPUTER SKILLS

Stata, QGIS, LaTeX, ODK, SurveyCTO.