

Intitulé du cours

Course title – Intitulé du cours	Institutions, Infrastructure and Development
Level / Semester – Niveau /semestre	MRes –S2
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	Stéphane Straub
Other teacher(s) – Autre(s) enseignant(s)	
Other teacher(s) – Autre(s) enseignant(s)	
Other teacher(s) – Autre(s) enseignant(s)	
Other teacher(s) – Autre(s) enseignant(s)	
Other teacher(s) – Autre(s) enseignant(s)	
Lecture Hours – Volume Horaire CM	
TA Hours – Volume horaire TD	
TP Hours – Volume horaire TP	15h
Course Language – Langue du cours	English
TA and/or TP Language – Langue des TD et/ou TP	

Teaching staff contacts – Coordonnées de l'équipe pédagogique :

Stéphane Straub, office T.355. Meeting by appointment. Preferred mean of interaction: by email (stephane.straub@tse-fr.eu) or after the classes.

Course Objectives – Objectifs du cours :

This course aims at providing students with an overview of recent research on infrastructure in the field of Development Economics, especially that concerned with the transport, energy, water and ICT sectors. Papers will cover industrial organization issues, the behavior of firms and governments, the organization and political economy issues such as corruption and political connections, as well as impact evaluations of infrastructure investments, policies, and regulation. The methodological coverage will be broad, including papers using applied theory, observational data, RCTs, and structural approaches.

Prerequisites – Pré requis :

The course is a course of the doctoral field on “Development Microeconomics.” It primarily targets students enrolled in the PhD program with a good background in Industrial Organization and Incentive Theory, as well as microeconometrics.

Practical information about the sessions – Modalités pratiques de gestion du cours :

Grading system – Modalités d'évaluation :

Students will have to write a paper on a topic related to those studied in class. They will have to read the literature on the chosen topics and structure it to make an analytical survey. It implies mastering the concepts covered in class, in addition to reading research papers to make an analytical survey. A small part of the mark (max 15%) will be based on class participation.

Practical information about the sessions:

Laptops or tablets are accepted in the class. Students' participation is expected and will be assessed and included in the final mark. Students are requested to avoid arriving to class late.

Bibliography/references:

Starred references (*) are the ones covered in priority during the classes. Other references are recommended reading.

1. Energy

Topics include the impact of energy infrastructure policy on economic and social outcomes, the evolution of demand for energy in developing countries, and the political economy of energy markets among others.

Kenneth Lee, Edward Miguel, and Catherine Wolfram. 2020. "Does Household Electrification Supercharge Economic Development?" *Journal of Economic Perspectives*—Volume 34, Number 1, Pages 122–144

* Gertler, P., O. Shelef, C. Wolfram, and A. Fuchs. (2016). "The Demand for Energy-Using Assets among the World's Rising Middle Classes," *American Economic Review*. Vol. 106, No. 6, pp. 1366-1401.

* Shaun McRae, "Infrastructure Quality and the Subsidy Trap", *American Economic Review*, 105(1), January 2015, 35–66.

* Lee, K., Miguel, T., and C. Wolfram. (2020). "Experimental Evidence on the Demand for and Costs of Rural Electrification." *Journal of Political Economy*.

Lipscomb, M., M. Mobarak and T. Barham, 2013, "Development Effects of Electrification: Evidence from the Topographic Placement of Hydropower Plants in Brazil", *AEJ: Applied Economics*, 5(2): 200--231.

T. Dinkelman, 2011, "The effects of rural electrification on employment: New evidence from South Africa", *American Economic Review*, 101(7): 3078--3108.

Allcott, Hunt, Allan Collard-Wexler, and Stephen D. O'Connell (2016). "How Do Electricity Shortages Affect Industry? Evidence from India." *American Economic Review*, Vol. 106, No. 3 (March), pages 587-624.

Philippe Alby, Jean-Jacques Dethier et Stéphane Straub, « Firms Operating under Electricity Constraints in Developing Countries? », *The World Bank Economic Review*, vol. 27, n° 1, 2013, p. 109–132.

2. Transport

Topics include the impact of transport infrastructure policy on economic and social outcomes such as growth and population movements, entry and exit of firms. We will start by reviewing the key theoretical framework by Eaton and Kortum, and will then focus on structural empirical work based on that framework (Donaldson). In addition, the course will cover issues such as the potential biases related to political connections and the use of big data to assess congestion policies for urban transportation.

* Eaton, Jonathan, and Samuel Kortum. 2002. "Technology, Geography and Trade." *Econometrica* 70 (5): 1741–79.

Eaton, Jonathan, and Samuel Kortum. "Putting Ricardo to Work", *Journal of Economic Perspectives* 26 (Spring 2012): 65-90.

Redding, S. & M. Turner. (2015) Transportation Costs and the Spatial Organization of Economic Activity, in (eds) Gilles Duranton, J. Vernon Henderson and William Strange, *Handbook of Urban and Regional Economics*, Chapter 20, 1339-1398.

* D. Donaldson, "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure", forthcoming, *American Economic Review*.

Bird, J. and S. Straub, 2020, " The Brasília Experiment: Road Access and the Spatial Pattern of Long-term Local Development in Brazil ", *World Development*, Volume 127.

Abhijit Banerjee, Esther Duflo and Nancy Qian. "On the Road: Access to Transportation Infrastructure and Economic Growth in China". forthcoming, *Journal of Development Economics*.

Ghani, E., Goswami, A. and W. Kerr, 2016, "Highway to success in India: the impact of the golden quadrilateral project for the location and performance of manufacturing", *The Economic Journal*, 126 (March), 317–357.

Storeygard, A., 2016, "Farther on down the road: transport costs, trade and urban growth in sub-Saharan Africa", *Review of Economic Studies* 83(3): 1263-1295.

Bleakley, Hoyt, and Jeffrey Lin. 2012. "Portage and Path Dependence." *The Quarterly Journal of Economics*, 127(2): 587–644.

* Robin Burgess, Remi Jedwab, Edward Miguel, Ameet Morjaria and Gerard Padro-i-Miguel. "The Value of Democracy: Evidence from Road Building in Kenya", NBER Working Paper No. 19398, forthcoming, *American Economic Review*, June 2015

* Rema Hanna, Gabriel Kreindler and Ben Olken, "Citywide effects of high-occupancy vehicle restrictions: Evidence from "three-in-one" in Jakarta", *Science*, Vol. 357 (6346), 2017.

Claudia Berg, Uwe Deichmann, Yishen Lieu and Harris Selod, "Transport Policies and Development," *Journal of Development Studies*, 2017, 53(4), 465-480.

3. Water and sanitation

We will cover papers performing impact evaluations of different water-related works or policies. We will also look in details at the complementarity between water and sanitation interventions in shaping the efficiency of policies and spurring behavioral changes.

* Duflo E. and R. Pande (2007), "Dams", *Quarterly Journal of Economics*, 122(2), 601-646.

* Galiani, S., P. Gertler and E. Schargrodsky (2005), "Water for Life: The Impact of Privatization of Water Services on Child Mortality", *Journal of Political Economy*, 113: 83-120.

Michael Greenstone, Esther Duflo, Raymond Guiteras, and Thomas Clasen, 2015, "Toilets Can Work: Short and Medium Run Health Impacts of Addressing Complementarities and Externalities in Water and Sanitation," Mimeograph.

* Alsan, M. and C. Goldin. (forthcoming). "Watersheds in Child Mortality: The Role of Effective Water and Sewerage Infrastructure, 1880 to 1920." *Journal of Political Economy*

* R. Guiteras, J. Levinsohn, A. M. Mobarak. "Demand Estimation with Strategic Complementarities: Sanitation in Bangladesh," 2019, mimeo.

Graham, J.P. Hirai, M., Kim S-S. 2016. An Analysis of Water Collection Labor among Women and Children in 24 Sub-Saharan African Countries, *PLoS One*. 11(6): e0155981.

4. ICT

This part will cover recent empirical paper assessing the impact of the extension of ICT networks (internet, mobil phones, mobile money, etc.) on economic and social outcomes. It will also review structural papers looking at the network effects with an industrial organization approach.

* Jonas Hjort and Jonas Poulsen, "The Arrival of Fast Internet and Employment in Africa", *American Economic Review*, vol. 109, no. 3, 1032-1079, March 2019

* Daniel Björkegren, "The Adoption of Network Goods: Evidence from the Spread of Mobile Phones in Rwanda," *The Review of Economic Studies*, Volume 86, Issue 3, May 2019, Pages 1033–1060.

* Jensen R. (2007), "The Digital Divide: Information (Technology), Market performance, and Welfare in the South Indian Fisheries Sector", *Quarterly Journal of Economics*, 122(3), 879-924.

Jenny Aker and Marcel Fafchamps, 2013, "How does mobile phone coverage affect farm-gate prices? Evidence from West Africa." *World Bank Economic Review*.

Jenny Aker and Isaac M. Mbiti. 2010. " Mobile Phones and Economic Development in Africa." Journal of Economic Perspectives. 24(3): 207-32.

Jenny Aker. 2010. " Information from Markets Near and Far: The Impact of Mobile Phones on Grain Markets in Niger." American Economic Journal: Applied Economics. 2: 46-59.

Jenny Aker, Christopher Ksoll and Travis Lybbert. 2012. "Can Mobile Phones Improve Learning? Evidence from a Field Experiment in Niger." 4(4), American Economic Journal: Applied Economics.

William Jack and Tavneet Suri, "Risk Sharing and Transaction Costs: Evidence from Kenya's Mobile Money Revolution". American Economic Review, 2014, Vol. 104 (1): 183-223.

Bossuroy, Thomas, Clara Delavallade, and Vincent Pons. "Can Biometric Tracking Improve Healthcare Provision and Data Quality? Experimental Evidence from Tuberculosis Control in India." Harvard Business School Working Paper, No. 19-077, March 2019.

Session planning:

Sessions will be allocated in a balanced way across the four main parts. They will include formal presentations of the core elements of the papers, as well as more informal discussion in the class.

Distance learning:

Distance learning (Zoom sessions) will be provided if made necessary by the evolution of the sanitary situation.