

## CURRICULUM VITAE

CAVAILHES Jean

Chargé de mission CESAER (UMR n° 1041 INRA/AgroSup, Dijon, France)

### WORKING ADDRESS:

INRA-CESAER 26 boulevard Docteur-Petitjean BP 87999 F-21079 DIJON cedex France  
Jean.Cavailhes@inra.fr

### EDUCATION

Agricultural engineer (Institut National Agronomique, 1968) Master of Economics (Université de Bourgogne et d'Alger, 1972)

### ACADEMIC POSITIONS

1968-1988: Chargé de Recherche

1988-2011: Directeur de recherche

2011-now : Chargé de mission

1994-1999: Head of the Department of Rural Economics and Sociology (Département d'Economie et Sociologie Rurales) of the INRA (Institut National de la Recherche Agronomique).

### Research Fields

Urban economics applied to periurban areas

Analyses of mixed residential/agricultural belts in metropolitan where exist proximity interactions between economic agents. The goal is to explain the scattered urban development and the residential spread into the countryside surrounding cities. Some of these models are calibrated on real world data; others are estimated in collaborations with geographers. Urban polycentrism and urban sprawl are explained by analytical models of urban economics and economic geography.

Environmental economics applied to landscape and climate values.

This research program evaluates hedonic prices of environmental goods, principally periurban landscapes in several French metropolitan areas, in collaboration with geographers to model the landscape view from ground level. The hedonic price of the climate is estimated, and its capitalisation into rents and wages allows assessing the contribution of global warming to the French GDP. The households' energy consumption is analysed in relationship with climate.

Economic geography applied to urban forms.

Analytical models combine urban economics and economic geography with the purpose of explaining metropolitan polycentrism and urban growth patterns, when urban costs (commuting and land rent) are the major dispersion force.

Land and real estate economics applied to land use, agriculture and land market.

Hedonic prices of housing attributes are estimated; land rent gradients are estimated by the way of land econometrics models, particularly to take into account urban influences on periurban farmland prices. These models are extended to empirical and microeconomics works on effects induced by cities on surrounding agriculture and the location of agricultural productions. The formation of capital gains from urbanization is analyzed (option value models) and is estimated econometrically in several French regions. Land use, especially artificialization, is analyzed theoretically, econometrically and factually.

Housing and urbanization economics

Analyzes of the international and French literature and of the facts in France: price formation, housing stock, evolution of the urban system under the effect of the globalization of the exchanges and the metropolisation of the territory.

Recent academic publications (selection 2011-2019)

Ay (J.S.), Hilal (M.), Le Gallo (J.), Cavailhès (J.) (2018). « Délivrer des permis de construire pour diminuer le coût du foncier ? Une estimation par la demande en terre constructible », *Economie et Statistique*, n°500-501-501, octobre 2018, pp. 45-67.

Hilal (M.), Legras (S.), Cavailhès (J.) (2018). Peri-Urbanisation: Between Residential Preferences and Job Opportunities, *Raumforschung und Raumordnung / Spatial Research and Planning*, April 2018, Volume 76, [Issue 2](#), pp 133–147.

Grout (C.), Cavailhès (J.), Détang-Desendre (C.), Thomas (A.) (2016), “Is sprawling residential behavior influenced by climate?”, *Land Economics*, vol. 92 (2), 203-219.

Legras (S.), Cavailhès (J.) (2016), “Environmental performance of the urban form”, *Regional Science and Urban Economics*, vol. 59, 1-11.

Caruso (G.), Cavailhès (J.), Peeters (D.), Thomas (I.), Frankhauser (P.), Vuidel (G.) (2015), “Greener and larger neighbourhoods make cities more sustainable! A 2D urban economics perspective”, *Computers, Environment and Urban Systems*, 82-94.

Caruso (G.), Cavailhès (J.), Peeters (D.), Thomas (I.), Frankhauser (P.), Vuidel (G.) (2015), “Housing land transactions data and structural econometric estimation of preference parameters for urban economic simulation models”, *Computers, Environment and Urban Systems*, Data in brief 5, 447-452.

Peeters (D.), Caruso (G.), Cavailhès (J.), Thomas (I.), Frankhauser (P.), Vuidel (G.) (2015), “Emergence of leapfrogging from residential choice with endogenous green space: analytical results”, *Journal of Regional Science*, vol. 55(3), 491-512.

Cavailhès (J.), Joly (D.), Hilal (M.), Brossard (T.), Wavresky (P.) (2014), « Economie urbaine et comportement du consommateur face au climat. Effet sur les prix hédonistes et sur l'étalement urbain », *Revue Economique*, 65 (4) : 591-619.

Cavailhès (J.), Thomas (I.) (2012), "Are agricultural and developable land prices governed by the same spatial rules? The case of Belgium", *Canadian Journal of Agricultural Economics*, 61: 439-463.

Cavailhès (J.), Hilal (M.), Wavresky (P.) (2012), "A new real option value due to a 'demographic risk' in the market for developable land", *Open Urban Studies Journal*, 5: 32-39.

Cavailhès (J.), Hilal (M.), Wavresky (P.) (2012), « L'influence urbaine sur le prix des terres agricoles et ses conséquences pour l'agriculture », *Economie et Statistique*, 444445, pp. 99-125.

Cavailhès (J.), Mesrine (A.), Rouquette (C.) (2012), « Le foncier agricole : une ressource sous tensions », *Economie et Statistique*, 444-445, pp. 3-18.

Joly (D.), Brossard (T.), Cardot (H.), Cavailhès (J.), Hilal (M.), Wavresky (P.) (2011), "Temperature interpolation based on local information: the example of France", *International Journal of Climatology* 31: 2141–2153.

Caruso (G.), Vuidel (G.), Cavailhès (J.), Frankhauser (P.), Peeters (D.), Thomas (I.) (2011), "Morphological similarities between DBM and a microeconomic model of sprawl", *Journal of Geographical Systems*, 13(1): 31-48.