

Research Project

Majorization and the Lorenz order: Theory and applications

Project funded by own resources

Project title Majorization and the Lorenz order: Theory and applications

Principal Investigator(s) Kleiber, Christian;

Organisation / Research unit

Departement Wirtschaftswissenschaften / Ökonometrie und Statistik (Kleiber)

Project start 01.10.2007 Probable end 31.12.2025

Status Active

The partial order of majorization is omnipresent in applied mathematics, statistics and various fields of application. It suggests comparing two given vectors, for example representing the incomes of two populations, by comparing the partial sums of their ordered entries. A slight generalization, the Lorenz order, also figures prominently in inequality measurement, where the Lorenz curve is used for visualizing and ranking income distributions. This project investigates various applications of majorization and the Lorenz order, among them inequality measurement and related problems in economics, Condorcet jury theorems in political science, statistical distribution theory, inequalities for special functions, and possibly even problems in the hard sciences.

Keywords Majorization, Lorenz order, stochastic orders, inequalities, economic inequality **Financed by**University funds

Add publication

Published results

103110, Kleiber, Christian, The Lorenz curve in economics and econometrics, 978-0-415-44337-1 (hbk.); 978-0-203-92792-2 (ebk), Advances on income inequality and concentration measures, Publication: Book Item (Buchkap., Lexikonartikel, jur. Kommentierung, Beiträge in Sammelbänden etc.)

Add documents

Specify cooperation partners

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit -	Laufzeit -
				von	bis
929276	Kleiber, Chris-	Zitikis, Ricardas, Professor	University of Western On-		
	tian		tario	01.01.2010	31.12.2020