

## Faculty Profile

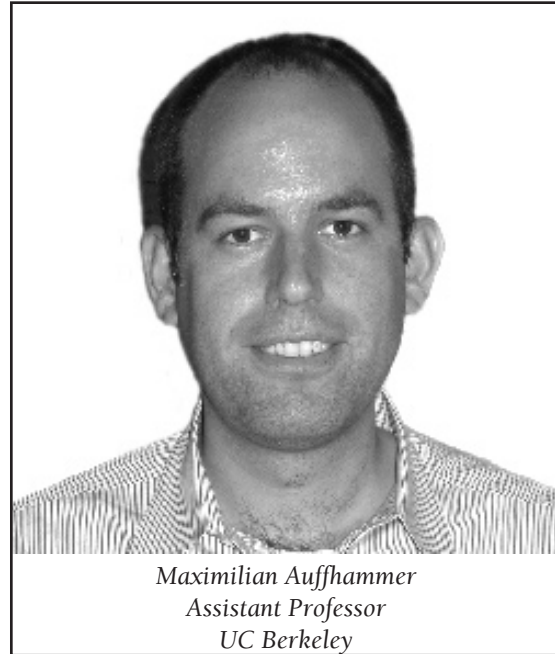
**M**aximilian Auffhammer is an assistant professor with a joint appointment in the Department of Agricultural and Resource Economics and the International Area Studies Program at UC Berkeley. Max received his Ph.D. in economics from the University of California, San Diego in June 2003.

Max's recent research in environmental and resource economics has focused on the role of air pollutants and climate change in the developing country context. His dissertation research on climate change provides the first forecasting model of China's greenhouse gas emissions, based on province-level data. Any meaningful agreement regulating global climate change has to include the top two emitters of greenhouse gases: the U.S. and China, which are jointly responsible for 41 percent of aggregate CO<sub>2</sub> emissions.

The U.S. has repeatedly based its participation in such an agreement on cutbacks by China. China has argued that any cutbacks should be specified relative to the level of emissions that would be projected to occur normally as it industrializes further. This makes emission forecasts a crucial component of a potential successor to the Kyoto Protocol. Exploring the provincial heterogeneity of China's technology, income as well as the changing level and distribution of population, suggests that changes in population and technology are driving variation in China's emissions forecasts.

In related work, Professor Auffhammer is interested in developing empirical methods to measure strategic production behavior prior to international environmental agreements. In a forthcoming paper, Stranlund, Morzuch and Auffhammer suggest that producers of chlorofluorocarbons anticipated the Montreal Protocol (which regulated the production of ozone depleting CFCs) asymmetrically, in order to obtain a favorable bargaining position resulting in a net increase in pre-treaty production.

In current work, he is interested in estimating the current and future market potential for privately owned cars across China's provinces. The double-digit growth rates of car adoption are likely to have a major impact on the long-run emissions of greenhouse gases. Growth has largely been fueled by rising incomes in the coastal provinces and the emergence of private credit markets. The limiting factors are the scarcity of China's national petroleum reserves combined with issues of fuel quality and refinery capacity. Max discusses these issues in the next issue of *ARE Update*.



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In other research, Professor Auffhammer is one of three economists on a team of scientists from the Scripps Institute of Oceanography and the UC Institute on Global Conflict and Cooperation. They are working on estimating the impact of the recently discovered Atmospheric Brown Cloud, which is a layer of air pollution covering much of Southeast Asia, on agricultural production and climate change.

Before dedicating himself to the study of environmental economics, Max worked for a large consulting firm specializing in financial institutions and brokerage. He also coordinated the program for the Second World Congress of Environmental and Resource Economists in Monterey, sponsored by the Giannini Foundation.

Max and Lori-Anne, an up-and-coming painter, live in San Francisco and are slowly getting used to climbing hills. They enjoy movies, hiking and cooking. Having lived in Southern California for the past five years, they are thrilled about the cultural offerings in the Bay Area. Max learned to ski before he learned to walk and cannot wait for the Tahoe experience. While in snow-challenged San Diego, he learned how to surf and sail.

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