Journal of Economic Perspectives—Volume 21, Number 2—Spring 2007—Pages 195–214

How Wages Change: Micro Evidence from the International Wage Flexibility Project

William T. Dickens, Lorenz Goette, Erica L. Groshen, Steinar Holden, Julian Messina, Mark E. Schweitzer, Jarkko Turunen, and Melanie E. Ward

Workers' wages are not set in a spot market. Instead, the wages of most workers—at least those who do not switch jobs—typically change only annually and are mediated by a complex set of institutions and factors such as contracts, unions, standards of fairness, minimum wage policy, transfers of risk, and incomplete information. The goal of the International Wage Flexibility Project (IWFP)—a consortium of over 40 researchers with access to individual workers' earnings data for 16 countries—is to provide new microeconomic evidence on how wages change for continuing workers. Wage changes due to worker mobility are governed by different processes and are beyond the scope of this study.

A key question in the theoretical and empirical literature, as reviewed in

■ *William Dickens is Senior Fellow in Economic Studies, The Brookings Institution, Washington, D.C. Lorenz Goette is Assistant Professor, University of Zurich, Zurich, Switzerland. Erica L. Groshen is Vice President and Economist, Federal Reserve Bank of New York, New York City, New York, and Research Fellow, Institute for the Study of Labor (IZA), Bonn, Germany. Steinar Holden is a Professor of Economics, University of Oslo, Oslo, Norway, and a Research Fellow, Center for Economic Studies—Information and Forschung Institute (CESifo), Munich, Germany. Julian Messina is Economist, European Central Bank, Frankfurt, Germany, Assistant Professor, Universitat de Girona and Research Fellow, Centre for Studies in Economics and Finance (CSEF), Università di Salerno, Italy. Mark Schweitzer is Assistant Vice President and Economist, Federal Reserve Bank of Cleveland, Cleveland, Ohio. Jarkko Turunen is Economist with the European Central Bank, Frankfurt, Germany. Melanie Ward is Senior Economist, European Central Bank, Frankfurt, Germany, and Research Fellow, Institute for the Study of Labor (IZA), Bonn, Germany. Their e-mail addresses are ⟨wdickens@brookings.edu⟩, ⟨lorenz@iew.unizh.ch⟩, ⟨erica.groshen@ny.frb.org⟩, ⟨steinar.holden@econ.uio.no⟩, ⟨julian.messina@udg.es⟩, ⟨mark.e.schweitzer@clev.frb.org⟩, ⟨jarkko.turunen@ecb.int⟩, and ⟨melanie.ward-warmedinger@ecb.int⟩, respectively.*

flexible wage setting are prevented by downward rigidity. Correspondingly, an average of 26 percent of workers are covered by downward real rigidity, in the sense that 26 percent of the real wage cuts that would have taken place under more flexible wage setting are prevented by downward rigidity. Measurement error appears to bias both measures downward, so the incidence of both nominal and real rigidities is probably higher. Nevertheless, these similar averages mask considerable variety: country averages for downward real wage rigidity range from 1 percent in the Netherlands to 68 percent in Sweden with a standard deviation across countries of 22 percentage points. For downward nominal wage rigidity, country averages for the fraction of workers covered range from 4 percent in Ireland to 58 percent in Portugal, with a standard deviation of 13 percentage points. Although differences in the nature of our data across countries certainly explain some of the cross-country variation of our rigidity measures, large differences remain even after we control for dataset characteristics.

Wage-setting behavior and wage rigidity have important implications for firm behavior, unemployment, macroeconomic stability, and other areas of economics; yet many questions remain to be answered about why these patterns occur. We have offered some hypotheses about the sort of wage-setting mechanisms that could underlie a Weibull distribution, but these explanations deserve further consideration and exploration. Although we examined many labor market and related economic variables that might plausibly help explain differences across countries in the extent of wage rigidity, the only solid connection we find is that union density has a robust positive association with downward real rigidity.

■ *This paper reports the results of the International Wage Flexibility Project. The International Wage Flexibility Project country team members are Cedric Audenis, Richard Barwell, Thomas Bauer, Petri Bockerman, Holger Bonin, Pierre Biscourp, Ana Rute Cardoso, Francesco Devicienti, Orrietta Dessy, John Ekberg, Tor Eriksson, Bruce Fallick, Ernst Fehr, Nathalie Fourcade, Seppo Laaksonen, Michael Lettau, Pedro Portugal, Jimmy Royer, Mickael Backman, Kjell Salvanes, Paolo Sestito, Alfred Stiglbauer, Uwe Sunde, Jari Vainiomaki, Marc van Audenrude, William Wascher, Rudolf Winter-Ebmer, Niels Westergaard-Nielson, and Josef Zuckerstaetter. We are grateful to the European Central Bank, IZA, Federal Reserve Bank of New York, and Volkswagen Foundation for their generous support. Philippe Moutot and Francesco Mongelli provided helpful guidance as our contacts at the ECB. The work of Julián Messina is partially supported by Research Grant SEJ2004-03276/ECON from the Spanish Ministry of Education and Science. The discussants and participants at the IWFP conference held in Frankfurt in June 2004 provided useful input that helped shape the project. Finally, Daniel Egel and Rebecca Vichniac wrote most of the programs used by the country teams and consulted extensively with them on the implementation of the IWFP protocol. Their contribution to the project goes well beyond what is normally acknowledged as excellent research assistance. The views expressed in this article are those of the authors and do not reflect the views of the Federal Reserve System, The European Central Bank, or any other organization with which authors or team members are affiliated.*