RAGE AGAINST THE MACHINES: LABOR-SAVING TECHNOLOGY AND UNREST IN ENGLAND, 1830-32*

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First version: December 2016 This version: January 2017

Abstract: Can the adoption of labor-saving technology lead to social instability and unrest? We examine a canonical historical case, the so-called 'Captain Swing' riots in 1830s Britain. Variously attributed to the adverse consequences of weather shocks, the shortcomings of the Poor Law, or the after-effects of enclosure, we emphasize the importance of a new technology – the threshing machine. Invented in the 1780s, it spread during and after the Napoleonic Wars. Using farm advertisements from newspapers published in 66 English and Welsh towns, we compile a new measure of the technology's diffusion. Parishes with ads for threshing machines had much higher riot probabilities in 1830 – and the relationship was even stronger for machine-breaking attacks. Threshing machines were mainly useful in wheat-growing areas. To establish a causal role for labor-saving technology, we instrument technology adoption with the FAO measure of soil suitability for wheat, and show that this in turn predicts unrest.

Keywords: Labor-saving technology; social instability; riots; welfare support; agricultural technology; factor prices and technological change.

JEL Classification: P16, J21, J43, N33

^{*} We thank Philipp Ager, Leo Bursztyn, Ernesto Dal Bó, Lorenzo Casaburi, Barry Eichengreen, Fred Finan, Julian Langer, Martha Olney, Morten Olsen, Daniela Scur, and Christy Romer for helpful discussions. Seminar audiences at UC Berkeley and at the University of Southern Denmark provided valuable feedback.