

COASE, TRANSACTION COSTS, AND THE SPREAD OF THE RECTANGULAR SURVEY FOR LAND DEMARCATION WITHIN THE BRITISH EMPIRE

GARY D. LIBECAP, DEAN LUECK, AND TREVOR O'GRADY

NOVEMBER 24, 2009

Abstract. This paper examines adoption of the rectangular system (RS) of land demarcation within European settlement colonies of the British Empire in the 18th and 19th centuries. This was a time when agricultural land markets were first developing on a widespread scale. These jurisdictions had similar immigrant populations and legal structures, but their land demarcation practices were quite different. The economic advantages of the rectangular system for lowering transaction costs in defining property rights and in promoting land markets as compared to historical, irregular and idiosyncratic survey of parcels under metes and bounds (MB) were generally well known in England by the late 17th century. The RS placed parcels into uniform shapes, aligned boundaries, and coordinated addresses. It was one objective of the Enclosure Movement, and the British Colonial Office issued circulars calling for systematic survey of land into square townships prior to settlement of land. Nevertheless, the RS had upfront costs. The U.S. adopted the RS for western frontier lands in 1785, and Libecap and Lueck (2009) and Libecap, Lopes, and Lueck (2009) find economically significant increases in land transactions, more road investments, fewer boundary disputes, and higher land values in two distinct areas under the RS, relative to MB. Yet the overall adoption of the RS in the Empire was varied. The original 13 U.S. colonies, the subsequent U.S. states of Kentucky and Tennessee, eastern Canada, and New South Wales and other parts of Australia were settled under metes and bounds. RS was implemented in scattered areas of the U.S. colonies, in Ohio and the rest of the western U.S., in much of Texas, in Manitoba and western Canada, South Australia, New Zealand, and parts of South Africa, Southern Rhodesia (Zimbabwe), and Kenya. We examine the determinants of this pattern of adoption. The paper is a contribution to the broader literatures on the determinants of institutional adoption and change; transaction costs, property rights, and markets; and coordination.