

Immigration and Knowledge Spillovers: Danish-Americans and the Development of the Dairy Industry in the United States

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Abstract

We exploit the example of Danish migration to the United States during the late nineteenth century to examine the hypothesis of knowledge spillovers through migration. Modern cooperatively-owned butter factories spread around Denmark within a decade after 1882, and by 1890 Denmark had established itself as a world-leading dairy producer characterized by institutional, technological and scientific innovation. We hypothesize that despite being few in number, Danish-Americans helped spread this knowledge to the US and thus played a central role for the growth and modernization of American dairying. Supported by a narrative based on historical evidence, we test our hypothesis using a difference-in-differences strategy, using data taken mainly from the US census. We find that counties with greater concentrations of Danes up to 1880 (before the transformation of Danish agriculture) do not appear to have enjoyed advantages in dairying compared to other parts of the country. Subsequently, however, they both specialized in dairying, and used more modern practices. This example illustrates the importance that even a small number of migrants can have on relative development.