Abstract:
Atmospheric pollution was an important side effect of coal-fired industrialisation in the nineteenth century. In Britain emissions of black smoke were on the order of fifty times as high as they were a century later. In this paper we examine the effects of these emissions on child development by analysing the heights on enlistment during the First World War of men born in England and Wales in the 1890s. Following Hanlon (2015) we use the occupational structure to measure the coal intensity of the districts in which these men were observed as children in the 1901 census. We find strong negative effects of coal intensity on height, which amounts to a difference of about an inch between the most and least polluted localities. These results are robust to a variety of specification tests and they are consistent with the notion that the key channel of influence on height was via respiratory infection. The subsequent reduction of emissions from coal combustion is one factor contributing to the improvement in health (and the increase in height) during the twentieth century.

Presenter:
Tim Hatton is Professor of Economics at the University of Essex in the UK and formerly Head of the Department of Economics. He also has an affiliation with the Australian National University where he was professor of economics from 2004 to 2014. He served as President of the European Society for Population Economics in 2010 and is a Fellow of the Academy of Social Sciences in Australia and a Fellow of the Academy of Social Sciences in the UK. His work in economic history focuses on labour markets, employment and welfare since the mid-nineteenth century, and his recent work on the long-run evolution of health and stature has been featured widely in the media. The other branch of his work is the causes and effects of international migration, both in a historical and a contemporary context. Most recently he has analysed trends in asylum applications to the countries of the EU, the development of asylum policy and changes public opinion towards immigrants and refugees.