

Title: The Impact of Remote Work on Crime Reduction in Danish Neighbourhoods

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Abstract

This paper investigates the relationship between the rise of remote work (WFH) and its impact on crime rates, particularly burglary and different street crimes. Utilizing Danish microdata for crime and applying the WFH index developed for the Danish labour force (Javakhishvili-Larsen et al. 2023¹), we analyse the effects of increased WFH on neighbourhood-level crime rates. Our study addresses whether the pandemic has created positive side effects for society, specifically if remote work enhances safety by reducing burglaries and street crime in Danish neighbourhoods. Finally, we investigate to what extent improved safety in the neighbourhood is capitalized in housing prices.

Building on findings from the UK and US, where significant burglary reductions were observed, we examine if similar patterns exist in Denmark. We explore spatial heterogeneity, investigating whether the crime-reducing benefits of WFH are offset in neighbourhoods surrounded by high-WFH areas, consistent with a spatial search model of criminal activity. Additionally, we analyse spatial spillovers and compare WFH's impact on crime in different types of settlements, such as single family detached housing areas vs. apartment blocks, low-income vs. high-income residential areas, etc.

Our methodology involves merging Danish registry data identifying the location of the committed/reported crime with comprehensive demographic and socioeconomic neighbourhood-level data including information about WFH and house prices. The data is derived from annual administrative register data from Statistics Denmark between 2010 and 2023. This approach allows for a comprehensive analysis of the interplay between remote work, crime rates, and neighbourhood safety, considering the socioeconomic characteristics of the neighbourhood residents.

This study contributes to the existing literature in several ways, firstly, it addresses the knowledge gap regarding the effects of the pandemic and transformative changes in work patterns, particularly the increasing prevalence of WFH. Secondly, it enhances understanding of neighbourhood safety, providing valuable insights for policymakers and urban planners in designing future neighbourhoods. Thirdly, it offers a comparative perspective by examining these trends in the Danish context, adding to the growing body of international research on this topic. Fourthly, it investigates the differential impact of WFH on various types of crimes,

¹ Javakhishvili-Larsen, N., Bøje-Kovács, B. J., & Geerdsen, L. P. (2023). Assessing pandemic-related risks and resilience of the Danish workforce: A methodological approach. Manuscript under revision in the Journal of Applied Economics. MPRA Series (No. 119553). <https://mpra.ub.uni-muenchen.de/119553/>

not limited to burglary, offering a more holistic view of remote work's effect on public safety. And lastly, it analyses the socioeconomic factors that may influence the effectiveness of WFH in crime reduction, contributing to more targeted policy interventions.

These contributions aim to provide a comprehensive understanding of the unexpected benefits of remote work on societal safety and welfare, offering valuable insights for future policy decisions and urban planning strategies.

Keywords: WFH, crime reduction, neighbourhood safety, neighbourhood planning, spatial inequality, house price