

# Effects of Social Insurance on Crime and Political Participation

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## Introduction

Social transfers to households are a dominating part of the government budget in most countries (32% of total government expenditures in Denmark last year),<sup>1</sup> and understanding how citizens react to various transfers is key for assessing the welfare consequences of these programs. While some aspects of these behavioral responses, such as consumption or job search intensity, are well understood, other types of behavior such as crime, democratic participation, and social integration, have received much less attention, even though these broader, more extensive consequences of social insurance are likely to be highly important for the total benefits, and thereby the optimal design, of the programs.

In this project, we propose to analyze the broader welfare consequences of unemployment benefits along two dimensions that extend beyond just the beneficiary himself and the period of time on benefits. We do this by asking *how the generosity of unemployment insurance affects criminal behavior and political participation*. These types of behavioral responses might not only have long-term consequences for the individual; they also impose externalities on other citizens. Both outcomes are relevant to policy makers in the design of social insurance programs and they potentially have substantial welfare consequences, but they are not well understood or quantified in the existing literature. As will be explained in detail below, we will use a unique combination of Danish administrative data and policy variation from several reforms to provide the first evidence of the causal effect of unemployment benefits on crime and political participation.

## Policy Relevance

Most OECD countries experienced a sharp rise in unemployment following the financial crisis ten years ago, and many are still struggling with high unemployment rates. This has put a pressure on current social protection systems, and has increased the need for a better understanding of the costs and benefits of different systems. The debate over the generosity of social transfers is highly salient in Denmark, and a significant number of policy reforms over the last two decades have been aimed at this area. By

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<sup>1</sup>Government social transfers are defined as all government transfers to households, excluding transfers in kind. Total unemployment benefits of various kinds made up 26% of total household transfers and 8% of total government expenditures in 2016. Source: Statistics Denmark, Statistikbanken, table OFF10 and OFF29.

studying potential broader benefits of social insurance policies in terms of their effect on crime and political participation, our study contributes new perspectives to the debate about the costs and benefits of social insurance policies. Furthermore, given the specific policy variation that we are using (to be described below), we also contribute to the important question about how to socially and economically integrate immigrants into society. At last, our study also relates to the debate about the consequences of poverty, and whether economic distress prevents certain families from climbing up the socio-economic ladder.

## **Background - Theory and Existing Evidence**

It is common in developed countries that the government provides income compensation in case of unemployment, disability or sickness. If households were perfectly able to smooth consumption around these events, there would be no social argument for providing government transfers. However, existing studies have shown that liquidity effects are prevalent, by which unemployment benefits affect consumption and job search behavior ([Card \*et al.\* 2007](#); [Chetty 2008](#); [Nekoei & Weber 2017](#)). It is therefore important to know whether social insurance also affects other outcomes, such as criminal and political behavior, which we would think are sensitive to “cash-on-hand” when households are liquidity constrained.

The outcomes we study are of broad interest to academic economists and policy makers alike. Criminal behavior has been shown to depend on individuals’ economic circumstances ([Dix-Carneiro \*et al.\* 2017](#)), and because crime imposes externalities on other citizens, they are often found to have a high willingness to pay for reductions in crime, both through house prices ([Lynch & Rasmussen 2001](#)) and via the tax system ([Rueda & Stegmueller 2016](#)). Furthermore, by examining how welfare participation shapes political participation in local and national elections, we contribute directly to a large literature in political economy that examines how the design of social policies structures citizens’ political involvement ([Soss 1999](#)). This literature is primarily descriptive, and we believe our focus on causal estimation on the effect of unemployment insurance levels would be a major contribution.

## **Empirical Strategy**

Our empirical approach builds on access to detailed, high-quality, Danish administrative data, and uses several policy reforms over the last two decades that introduced variation in benefits levels and eligibility. From the administrative data, we observe criminal charges and convictions at the individual level, which will be the unit of analysis for this part of the project. We do not observe political participation at

the individual level, but as part of this research project we will create a method (described in detail in the budget) for aggregating administrative data to the polling place, which will be the level of analysis for this part of the project.

We will specifically use the variation in unemployment benefits coming from the introduction and repeal of the so called “starthjælp”. Starthjælp was introduced by July 1 2002, and applied to everyone immigrating to Denmark who had resided outside of the Nordic countries and the EU for more than a year within the last eight years. It was repealed in 2012 by the then new government, and reintroduced in September 2015 after government had changed again. The fundamental empirical challenge for estimating the causal effect of unemployment benefit levels on crime and political participation is to determine counterfactual outcomes. Given the timing and design of the reform (starthjælp), we have several promising options for constructing a reasonable counterfactual.

The first option is to use a difference-in-difference (DiD) design that exploits variation in eligibility. One possibility is to focus on the event of unemployment over the period July 2002 to January 2012 for people eligible for the basic social assistance (kontanthjælp). Here we want to compare those who immigrated after July 2002 (treatment group, eligible for starthjælp) to those who immigrated in the years up to July 2002 (control group, eligible for kontanthjælp). In a similar manner, another possibility is to do a DiD analysis around the repeal of starthjælp in 2012. Here we want to focus on a group of people who are already on the basic social assistance and compare those who go from lower benefits (starthjælp) to standard benefits (kontanthjælp) to those who experience no change in benefits.

The second option for identification is to use a Regression Discontinuity design ([Lee & Lemieux 2010](#)) where we compare outcomes for refugee immigrants who arrived narrowly before July 1 2002 to refugee immigrants who arrived immediately after. The identifying assumption is that arrival within this narrow window is essentially random. This approach has been successfully used in a study by [Rosholm & Vejlin \(2010\)](#) who look at employment of refugee immigrants. It should be noted that using only refugees who arrived close to July 1 2002 limits the number of available observations, which means that this empirical strategy is most likely to be applicable for studying criminal behavior.

## **Participants, Time Line, and Expected Outcome**

We are two researchers participating in this project (please see the attached reference and resumes): Sebastian Barfort is a postdoctoral researcher at the London School of Economics (LSE). He finished his PhD in Economics at the University of Copenhagen in 2015. Amalie Jensen is a PhD student in Economics at the University of Copenhagen. She will be a postdoctoral researcher at Stanford University from September 2017. Together, we have worked with Danish administrative data for approximately 10

years in the areas of public finance and political economy.

Amalie is currently located in Copenhagen, but will move to the US from September. Sebastian is currently located in London. While he will keep his affiliation with the LSE, he will be based in Copenhagen from September and will be at the University of Copenhagen two days a week. We both have a strong attachment to the University of Copenhagen and the EPRU, and have participated in the EPRN conference for many years. We intend to maintain our network in Copenhagen and the affiliation with EPRU, and we plan to also attend the EPRN conferences in the future. In the budget, we have applied for funding to go to the conference in 2018 and 2019, in order to participate and present the results of the project. Our affiliations with the LSE and Stanford mean that we will be able to present our results in front of the very strong group of researchers who reside at these universities.

The expected outcome for this project is 1-2 academic papers. Given the novelty of our research question, the policy relevance, and the features of the Danish data and reform setup, we aim to be able to publish the results in the best field journals in economics. We expect to get the data from Statistics Denmark within the next 6 months. We will then clean the data and carry out the analysis, and we expect to have the first results ready by summer 2018. We will spend some time presenting and discussing the project, and expect to have the first paper ready for journal submission during 2019. We plan to either present some preliminary results at the EPRN conference in 2018 or present a more polished paper at the conference in 2019.

## **Budget**

This project's expenses broadly fall into two categories: funds for *data collection* and *conference expenses*. Statistics Denmark has made us aware that they will begin charging a flat fee for creating new research projects at their secure servers. After conferring with our data manager at the Department of Economics, Simon Boserup, we estimate the start-up and running costs for the project database to be 30,000 DKK. Furthermore, a central component of our application is to create a crosswalk that allows us to aggregate individual level data to the polling place level for all local and national elections going back to 1990. This part is crucial for one of the two outcome variables, political participation, which is not observed at the individual level at Statistics Denmark. We create this crosswalk in two steps. First, we obtain geographical information on gps-coordinates of the boundaries of all polling places in Denmark. These are available in the Danish Election Database which is administered by the Department of Political Science at Aarhus University. From these geographical boundaries, Statistics Denmark will map individual addresses into these geographical units, which will allow us to assign every address in Denmark to a unique polling place. We estimate the costs of this to be approximately 45,000 DKK. When we have

created and validated the crosswalk, we will make it available to other researchers with an affiliation to the Department of Economics or EPRN, thereby allowing other researchers to conduct their own analysis at the polling place level.

We aim to present our results at the best economics and political science conferences such as those of the American/European Economic Association or the American/European Political Science Association. For this reason, we are including expenses for one American and one European conference each, as well as funding for Amalie to fly to Copenhagen in order to be able to participate and present our results at the yearly EPRN conference. We have previously been accepted at several of these and similar conferences in the past (see attached CVs). An overview of our budget can be seen in Table 1 below.

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