The effect of releasing SP funds on private spending

Claus Thustrup Kreiner, David Dreyer Lassen, Søren Leth-Petersen
Economic Policy Research Unit, University of Copenhagen
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Introduction

In March 2009, the Danish Government decided to give households access to withdraw the so-called Special Pension funds (SP) in the period 1 June – 31 December 2009. The purpose is to stimulate household sector consumption and thereby to boost aggregate economic activity. The objective of the proposed study is to answer the following question:

To what extent did releasing the SP funds lead to increased private spending, increased free savings, reduction in private debt, or increased private pension contributions?

The SP scheme was introduced in 1998, and required all wage earners to pay 1 percent of their salary to a personal account, the balance of which would be paid out at retirement. Payments to the scheme were suspended from 2004. The total amount of SP funds by 1 March 2009 is about 43 billion DKK, corresponding to about 5.1 percent of total private consumption expenditure,[1] and this is the maximum potential direct stimulus effect to the economy. Around 3.2 million individuals have savings on an SP account and the average amount per individual is 15,100 DKK, and each individual will have to decide whether to withdraw all the funds from the account or to do nothing. As will be explained in more detail below, this is a unique experiment in that it allows us both to estimate key policy parameters of interest for designing Danish economic policy as well as to contribute to the research literature on consumer behavior within the life-cycle framework.

Policy relevance

Governments across the OECD area are currently implementing fiscal stimulus measures to revive ailing economies, but despite their widespread use, not much is known about the economic effects of such stimuli. Our study should be of primary interest to (Danish) policy makers wishing to use fiscal stimuli in order to recover aggregate economic activity. We make two contributions: First, our empirical analysis will be based on a random sample from the population, making it possible to calculate the aggregate spending effect of the SP release which will be useful when considering future fiscal stimuli. The Danish economy is currently experiencing a large recession, and it is exactly under these circumstances (where for example many people may be credit constrained) interesting to know the extent to which it is possible to stimulate private spending. Second, detailed micro data will also reveal which groups are most likely to respond to the policy and in what way, and this information can be used in the future to target stimulus policies to groups where the effect is the largest.

[1] This is measured as the amount of funds released relative to total private sector spending in 2007. While the SP release was announced in conjunction with the Danish Tax Reform of 2009, the latter does not take effect until 2010, when the window for withdrawing funds has closed.

Our study

Our analysis of the effects of the SP release contains two parts: In the first part, aimed at quantifying the effect of the SP release on spending, we plan to conduct a survey covering a stratified random sample, constructed in cooperation with ATP, of minimum 4,000 individuals with a positive SP-balance. The survey is conducted in early January 2010, when the release period has just ended. The purpose of the survey is to collect information about the propensity to use SP withdrawals for spending, for reducing debt, increasing savings, or for increasing contributions to other pension schemes. The survey will provide us with information on spending that does not exist in (and cannot be recovered from) administrative register data, and this information is crucial for understanding the magnitude of the stimulus effect of the SP release. It is essential for the present purpose that the survey includes a large number of respondents, since the SP release provides only a moderate (potential) stimulus at the individual level. Subsequently, the survey data will be merged with demographic data and income tax register data for 2008 from Statistics Denmark. This will allow us to identify low income households and households holding limited amounts of liquid assets which are often used proxies for being credit constrained.

In the second part of the study, we will obtain register data (available in late 2010) for the entire population covering 2008 and 2009 and focus on the effect of the SP-release on debt reduction, savings and substitution towards alternative pension savings schemes. While the second part will not bring direct insights on spending behavior, it will, due to enormous amounts of data, enable us able to give a detailed description of the effect on the SP release on the alternative uses.

Theoretical background

Our theoretical basis for understanding consumption and savings decisions in economics is the life cycle framework (see Browning and Lusardi, 1996). In that framework, consumers behave rationally and wish to smooth (marginal utility of) consumption across time. In the extreme case, Hall (1978), consumption is constant across the life cycle, and the *level* of consumption is determined by the total amount of resources (primarily income) available across the entire life span, but not on the timing of its arrival. The release of the SP funds does not affect the level of life time resources, but only the timing of the arrival of resources. The standard unrestricted model would therefore predict a small effect on spending from the SP release. If, however, consumers are constrained in the credit market then access to additional liquidity may have a large effect on spending or may be used to reduce existing but expensive debt.[2]

The Danish reform of the SP pension scheme provides a perfect natural experiment to test theories of consumption/saving behavior in the life-cycle framework and the impact of stabilization policies aiming at stimulating private consumption: First, the reform is comprehensive and was entirely unanticipated (before the political agreement, popular discussion concerned expected tax changes, but not expected

[2] A number of alternative explanations for consumer response to the SP release, including myopic and boundedly rational behavior as well as tax planning, will also be considered.

changes in the SP pension scheme). Second, in contrast to the existing (mainly US based) literature,[3] the Danish reform is ideal for testing the life cycle framework because the reform keeps (almost) constant the level of life time resources, while changing the timing of the arrival of these resources. Finally, we are able to link data on SP accounts and survey data with administrative data from Statistics Denmark that contains information not available in most other countries.

The SP release scheme is different from the much studied US stimulus policies because SP funds do not provide households with a windfall gain. Contrary to tax refunds, the SP funds are already part of people's life cycle wealth, and – according to the life cycle framework – getting access to these funds should only be of importance for household spending if consumers are affected by credit constraints. As a consequence, the setting also allows us to assess (entirely within the life-cycle framework) the importance of credit constraints for individual level consumption and savings decisions. While the theoretical consequences of credit constraints on consumption patterns are well-developed, operationalizing and quantifying the effects of credit constraints empirically has proven extremely difficult; for example, Browning and Lusardi (1996) survey 25 studies from which no consensus emerges. The SP release will allow us to continue a research program, initiated by Leth-Petersen (2009), on the economic importance of credit constraints.

Compared to existing studies, our proposed study is based on an experimental setting that is much more powerful. First, the Danish policy scheme has a large *potential* for stimulating consumption. The amount of funds released through the Danish scheme equals 5.1 percent of total private sector spending, whereas the US 2001 tax rebate had a maximum potential stimulus effect of 2.2 percent. Second, the Danish policy experiment keeps life time resources constant at the individual level and, therefore, provides a cleaner test of credit constraints than most previous studies. Finally, the combination of survey and register data, from which it is possible to track the earnings and financial histories of households, makes it possible to give a much more precise description of the response heterogeneity.

Expected output and publication potential

The output of the project is expected to be 1-2 academic papers. The relevant existing papers on these issues have been published in top-5 journals or the best field journals. Given the unique features of the Danish policy experiment, we expect to be able to make contributions at the same level. In addition, we expect to present the results for Danish policy makers in a variety of ways. We plan to have results on the first part ready during 2010, and at least one paper ready for journal submission during 2011 (possibly including results from the second part of the project, data for which becomes available in late 2010).

[3] Earlier studies based on micro data has focused on the effects of US stimulus policies given as temporary tax rebates, primarily the US tax rebates in 2001 and 2008; see, for example, Shapiro and Slemrod (2003, 2009), Johnson et al. (2006) and Argawal et al. (2008).

Budget

This application concerns only funds for carrying out the survey for the first part of the analysis. The survey will ask recall questions about consumption and financial transactions. For this to have maximum credibility, it is crucial that the survey is conducted immediately after the window for withdrawing SP funds have closed, i.e. in early January 2010. We have inquired SFI survey about the costs of conducting a survey covering 4,000 persons. They estimate the costs to be 400.000 DKK, and expect a response rate of about 70 percent providing a net sample of some 3000 persons. The first part of the analysis is sufficient to write at least one paper. However, we plan to apply for funding elsewhere in order to carry out the second part of the project.

We have already carried out some preliminary work on the project. We are in contact with ATP who is willing to help us with data on SP accounts holders, their balance and information on if/when they withdraw their SP-balance. In addition, we have made a preliminary outline of survey questions, which we use for negotiating with survey companies.

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