

Report

Policy Research Center  
Research Project Accomplishment Report

Date: 2019/2/11

Project Leader: Associate Professor Ponpoje Porapakarm

Research Project Title: Economic Inequality and Intergenerational Transfers

Duration (yyyy/mm/dd): 2018/4/1 ~ 2019/3/31 1-year

Co-Investigator	Title	Name	Affiliation	(Remarks)
Co-Investigator 1	Assist Prof.	Svetlana Pashchenko	University of Georgia, USA	
Co-Investigator 2				
Co-Investigator 3				
Co-Investigator 4				
Co-Investigator 5				

**Project aims and goals:**

In this project we examine the important role of individual's rate of time preference in explaining adults' economic behaviors. Specifically, we documented that individuals tend to claim their social security benefits as soon as they are eligible. Since there is a large benefit reduction for an additional year of early claim, this results in a large income inequality between those who claim their benefits early and those who claim benefits at full retirement age or later. We explore various factors, including the rate of time preference (or subjective discount factor), that potentially account for this observation using a structural life cycle model. Since most elderly rely on social security income as their main source of income, our findings can have an implication on policies related to economic inequality among this group.

**Accomplishment(s) of Project (400 words):**

We document that despite a relatively large reduction in pension benefits (as high as 20%) from claiming social security too early, a large fraction of adult population (almost 60%) claims their benefits before the full retirement age. We, first, argue that since delaying claiming is equivalent to purchase additional annuity income, this observation implies that the demand for the social security annuity is relatively low. Second, we show that the social security annuity is, in fact, priced below the actuarially fair level for individuals younger than the full retirement age, thus making this observation difficult to explain. Third, we compares the low demand for public social security annuity to the well-studied private annuity demand puzzle or the low demand in private annuity markets. Using a lifecycle structural model, we show that the low demand for public annuities can be well explained by a significant discrepancy between: (i) the individuals' rate of time preference, and (ii) the discount rate implied by the implicit price schedule of the social security annuity. Then we show that if individuals are offered actuarially fair annuity priced based on the discount rate that exceed their rate of time preference, substantially more people will choose to delay social security benefit claim, thus mitigating the income inequality among the elderly population. Finally, we find that converting the social security benefits from annuity payment into lump sum payment can induce a large fraction of people to delay their social security claim.

*Future development of this research:* (i) As of today, we are preparing the final paper from the project for a submission at a peer-reviewed international journal. (ii) Our last two findings mentioned above have an important implication on the Social Security reform. Specifically, in contrast to existing studies on the Social Security reform that focus mainly on increasing retirement ages, cutting pension benefits, or increasing various taxes, we find that changing the penalty and reward schedule of Social Security benefits can have a significant effect on individuals' claiming behaviors and, possibly, retirement decisions. Thus, it is possibly to use the benefit schedule as an additional tool to reform the social security system under an aging population. I and my Co-PI are developing another research project related to the social security reform along this novel direction. We plan to include this project in our grant proposal in the future.

Accomplishments:

Please fill in [\[the list of Accomplishment\]](#)

**Other things to report:**

(Please include all items within one page.)

List of Accomplishment

List of Accomplishment

(including forthcoming )

(If the description exceeds five in each item, please add a line as necessary.)

**Article**

Academic papers (including those published in general journals)

\*For collaboratively authored papers, please underline your name.

\*Please report "Peer-reviewed academic conference papers" as well.

	Author	<sup>1 in total</sup>	Publisher	Date of Publications	Pages (from)	Pages (to)	Referee Report (yes=1)	<sup>1</sup>	DOI	<sup>1</sup>
		Title						The number of referred article		Internatio
1	<u>Svetlana Pashchenko, Ponpoje Porapakkarm</u>	Accounting for Social Security Claiming Behavior	Working paper at Center for Retirement Research (Boston College)	5-Oct-18	1	- 38		1		1
2										
3										
4										
5										

**Book**

\*For collaboratively edited or authored books, please underline your name.

\*If you are an author of a chapter in a book, please report in "Article" category.

	Author	<sup>0 in total</sup>	Publisher	Date of Publications	Total pages
1		Title			
2					
3					

**Verbal report / Conference presentation**

\*Here please report "Non-peer-reviewed academic conference papers".

\*When you or co-invetsigetor had a lecture/presentation as invitees, please specify "(invited lecture)" after Event Title.

	Presenter	<sup>2 in total</sup>	Event Title	Venue	Date
1	<u>Svetlana Pashchenko</u>	Accounting for Social Security Claiming Behavior	Society for the Advancement of Economic Theory Annual Meeting	Academia Sinica (Teipai, Taiwan)	11-Jun-18
2	<u>Ponpoje Porapakkarm</u>	Accounting for Social Security Claiming Behavior	GRIPS-NTU macroeconomic conference	National Taiwan University (Teipai, Taiwan)	19-Feb-19
3					
4					
5					