

Policy Research Center Research Project Accomplishment Report

Date: _____

	Name	Title	Affiliation
Project Leader:	Minchung Hsu	Associate Professor	GRIPS

Research Project Title:

Income Inequality and Optimal Income Tax

Project duration:

2015/4/1

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2017/3/31 2年間

Project Participants:

	Name	Title	Affiliation
Leader			
Participant 1	CC Yang	Distinguished Research fellow	Academia Sinica
Participant 2			
Participant 3			
Participant 4			
Participant 5			

Project aims and goals:

The literature of optimal taxation has debated about the degree of progressivity that the income tax should have. Recently, because of the heavy government financing burden, major European economies (eg. France and Spain) have planned to increase the tax rates for high income earners. France even planned to set a 75% tax rate for top income earners. However, previous studies in the optimal income tax literature found a striking result that the marginal tax rate for the top income earners should be zero due to the economic efficiency.

The equity-efficiency trade-off is conventionally the center of the optimal income taxation literature, which is pioneered by Mirrlees (1971, Review of Economic Studies). Progressivity improves the equity by redistribution from the rich to the poor, but high marginal tax rates discourage the labor supply from productive workers. Saez (2001, Review of Economic Studies) developed a simple approach by using elasticities to derive optimal tax rates and showed that the optimal high income tax is positive and generally above 40%. Our project is to extend Saez's approach and generalize it to a dynamic stochastic general equilibrium environment with heterogeneous agents, in which the income/wealth distributions match the data.

Furthermore, with taking into account a country's household income dynamics and level of inequality, the method can be applied to different countries and we can provide a cross-country comparison of optimal tax system design.

Because Saez illustrates the optimal design of income tax in a static world, the behavior changes of individuals are not taken into account. With a dynamic model, we are able to consider the responses from individuals to a tax schedule over time that is important for constructing the optimal tax schedule. Some recent studies have tried to extend the discussion of optimal taxation to a dynamic environment. Golosov, Troshkin and Tsyvinski (2011, NBER working paper; R&R to AER) is one example. They suggest that the marginal tax rate for high income earners should be close to zero, which largely deviates from Saez's finding. In this project, we plan to model both labor and saving decisions in a dynamic framework to investigate behavior changes and tax distortions for the design of tax system.

In addition, the equity-efficiency trade-off is always the focus of the optimal taxation literature, but the real income/wealth inequality is rarely discussed for the design of the optimal tax schedule. We plan to carefully take into account the inequality in the real world through a comprehensive data analysis.

Accomplishment of Project(in 400 words):

1. We have done the literature review on optimal taxation and summarize previous findings.
2. We have developed a theoretical model, which is able to account for labor/saving behavior changes dynamically and to replicate the realistic income/wealth distribution.
3. We have extended the approach of elasticities, as introduced in Saez (2001), to a dynamic stochastic environment.
4. We have collected data from the US for income inequality and use it in the model for designing the optimal income tax system.

Accomplishment:

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

Other things to report:

List of Accomplishment

(including forthcoming)

Article

Academic papers (including those published in general journals)

*For collaboratively authored papers, please underline your name.

	Author	1 in total Title	Publisher	The number of referred article Vol/No/ Page	1 Date of Publications	Start page	Finish page	Refere e Report (checkbox)
1	<u>Minchung Hsu</u> , Xianguo Huang, Somrasri Yupho	The Development of Universal Health Insurance Coverage in Thailand: Challenges of Population Aging and Informal Economy	Social Science & Medicine, Elsevier	145/ 227-236	Nov-15	227	- 236	1
2							-	
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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	0 in total Title	Publisher	Date of Publications	Total pages
1					
2					
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4					
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Verbal Report

*Please report peer-reviewed academic conference papers in "Article" category. Please report non-peer-reviewed academic conference papers "Verval Report" category.

	Name	3 in total Title	Name of the workshop	Report Date	Venue
1	Minchung Hsu	Low Fertility, Rapid Aging and Fiscal Challenges with the Presence of Informal Employment	Macroeconomic workshop, Keio University,	2015/10/13	Keio Univ
2	Minchung Hsu	Low Fertility, Rapid Aging and Fiscal Challenges with the Presence of Informal Employment	Econometric Society World Congress	2015/8/18	Montreal
3	Minchung Hsu	Low Fertility, Rapid Aging and Fiscal Challenges with the Presence of Informal Employment	Public Economics Theory 2015 Conference	2015/7/3	Luxemb urg
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