

Social Insurance Module 3, 2019-2020

Course Information

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Office Hour: Friday 5:30-7:30 pm or by appointment

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Classes:

Lectures: Tuesday & Friday 3:30 pm -5:20 pm

Venue: PHBS Building, 313

1. Course Description

1.1 Context

Course overview: Social insurance is a program where risks are transferred to and pooled by government that is legally obligated to provide a certain form of benefits. Recent rises in economic uncertainty raised the importance of social insurance. Along with greater economic volatility, a rapid increase in life longevity with a low birth rate made individuals bear more risks on disposable incomes — such as risk on post-retirement income, risk on health expenditure, and risk on unemployment. This course provides various theoretical and empirical studies on social insurance which gains rising importance in public finance field. In particular, this course discusses public pension programs, unemployment insurance, and public health insurance in many countries including China and the US. In addition to understanding social insurance, this course discusses economic effects of social insurance policies.

Prerequisite: Microeconomics 1 and Macroeconomics 1

1.2 Textbooks and Reading Materials

Suitable textbook is not currently available, so sets of pertinent research articles will be used for class materials as well as reading assignment. Lecture notes will be provided on each topic.

Class Materials (Reading List): Required reading before class is noted by *.

[1] Economics of Insurance Provision by Government

Laffont, Jean-Jacques *The Economics of Uncertainty and Information*, 1993, The MIT Press, Cambridge, Massachusetts. Chapter 1, 2, and 8

*Rothschild, M., and J. Stiglitz "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information" *Quarterly Journal of Economics*, 1976. 90:629-49.

Huggett, Mark and Juan Carlos Parra "How Well Does the U.S. Social Insurance System Provide Social

- Insurance?" Journal of Political Economy, 2010. 118(1): 76-112
- Barr, Nicholas and Peter Diamond "The Economics of Pensions" *Oxford Review of Economic Policy*, 2006. 22 (1): 15-39.
- Einav, Liran and Amy Finkelstein "Selection in Insurance Markets: Theory and Empirics in Pictures" *Journal of Economic Perspectives*, 2011. 25:115–138.
- Holmstrom, Bengt "Moral Hazard and Observability" Bell Journal of Economics, 1979. 10: 74-91.

[2] Post-Retirement Income Insecurity Facing a Rapid Demographic Change

- *Poterba, James M. "Retirement Security in an Aging Population" *American Economic Review*, 2014. 104(5): 1-30.
- Scholz, John Karl, Ananth Seshadri, and Surachai Khitatrakun. "Are Americans Saving "Optimally" for Retirement?" *Journal of Political Economy*, 2006. 114(4): 607-643.
- Jeffrey R. Brown, and Olivia S. Mitchell "Who Values the Social Security Annuity? New Evidence on the Annuity Puzzle" *NBER Retirement Research Center Paper* No. NB 07-02 December 2007
- Bernheim, B. Douglas, Jonathan Skinner and Steven Weinberg "What Accounts for the Variation in Retirement Wealth among U.S. Households?" *American Economic Review*, 2001. 91(4): 832-857.
- Aguila, Emma, Orazio Attanasio, and Costas Meghir "Changes in Consumption at Retirement: Evidence from Panel Data" *Review of Economics and Statistics*, 2011. 93(3):1094-1099.

[3] Defined Benefit Pension vs. Defined Contribution Pension

- *Bodie, Zvi, Alan J. Marcus, and Robert C. Merton "Defined Benefit Versus Defined Contribution Pension Plans: What Are the Real Trade-offs?" *Pensions in the US Economy*. University of Chicago Press, 1988.
- Poterba, James, Steven Venti, and David Wise "The Rise of 401(k) Plans, Lifetime Earnings, and Wealth at Retirement" in David A. Wise eds. *Research Findings in the Economics of Aging*, The University of Chicago Press, 2010.
- Poterba, James, Joshua Rauh, Steven Venti, and David Wise "Defined Contribution Plans, Defined Benefit Plans, and the Accumulation of Retirement Wealth" *Journal of Public Economics*, 2007. 91:2062–2086.
- Cocco, Joao F. "Defined Benefit or Defined Contribution? A Study of Pension Choices" *The Journal of Risk and Insurance*, 2011. 78(4): 931-960.

[4] Unfunded Pension System (Pay-as-you-go System) vs. Funded Pension System

- *Sinn, Hans-Werner "Why a Funded Pension System Is Needed and Why It Is Not Needed." *International Tax and Public Finance*, 2000. 7(4): 389-410.
- Aaron, Henry "The Social Insurance Paradox" *Canadian Journal of Economics and Political Science*, 1966. 32: 371–374.
- Feldstein, Martin S. "The Missing Piece in Policy Analysis: Social Security Reform" *American Economic Review*, 1996. 86: 1–14.
- Bongaarts, John "Population Aging and the Rising Cost of Public Pensions" *Population and Development Review*, 2004. 30(1): 1-23.
- Lachance, Marie-Eve, and Olivia S. Mitchell "Guaranteeing Individual Accounts" *American Economic Review*, 2003. 93(2): 257-260.
- Breyer, Friedrich, and Martin Straub "Welfare Effects of Unfunded Pension Systems When Labor Supply is Endogenous" *Journal of Public Economics*, 1993. 50(1): 77-91.
- Krueger, Dirk and Felix Kubler "Pareto-Improving Social Security Reform when Financial Markets Are Incomplete!?" *American Economic Review*, Vol. 96, No. 3 (Jun., 2006), pp. 737-755

[5] Notional Defined Contribution System

*Auerbach, Alan J. and Ronald Lee "Notional Defined Contribution Pension Systems in a Stochastic Context: Design and Stability" in *Social Security Policy in a Changing Environment*, eds by Brown, Liebman, and

- David Wise. 2009.
- Auerbach, Alan J. and Ronald Lee "Welfare and Generational Equity in Sustainable Unfunded Pension Systems" *Journal of Public Economics*, 2011. 95(1):16–27.
- Cichon, Michael "Notional Defined-Contribution Schemes: Old Wine in New Bottles?" *International Social Security Review*, 1999. 52(4): 87-105.
- Börsch-Supan, Axel "From traditional DB to notional DC systems: The Pension Reform Process in Sweden, Italy, and Germany" *Journal of the European Economic Association*, 2005. 3(2): 458-465.
- Williamson, John B., Meghan Price, and Ce Shen "Pension Policy in China, Singapore, and South Korea: An Assessment of the Potential Value of the Notional Defined Contribution Model" *Journal of Aging Studies*, 2012. 26 (1): 79-89.
- Liu, Zilan "Review and Overhaul of Chinese Rural Public Pension System" *National Public Management and Discussion*, 2003. 8:46-57. (Original article is in Chinese)

[6] Risk Sharing of Public Pension Systems

- *Laurence Ball and N. Gregory Mankiw "Intergenerational Risk Sharing in the Spirit of Arrow, Debreu, and Rawls, with Applications to Social Security Design" *Journal of Political Economy*, 2007. 115 (4): 523-547
- Gottardi, Piero, and Felix Kubler "Social Security and Risk Sharing" *Journal of Economic Theory*, 2011. 3: 1078-1106.
- Gollier, Christian "Intergenerational Risk-sharing and Risk-taking of a Pension Fund" *Journal of Public Economics*, 2008. 92(5): 1463-1485.
- Beetsma, Roel, Ward E. Romp, and Siert J. Vos "Voluntary Participation and Intergenerational Risk Sharing in a Funded Pension System" *European Economic Review*, 2012. 56(6): 1310-1324.
- Cui, Jiajia, Frank de Jong, and Eduard Ponds "Intergenerational Risk Sharing within Funded Pension Schemes" *Journal of Pension Economics & Finance*, 2011. 10(1): 1-29.

[7] Taxation on Pensions

- *Feldstein, M., and A. Samwick "Social Security Rules and Marginal Tax Rates" *National Tax Journal*, 1992. 45(1): 1-22.
- *Disney, Richard "Are Contributions to Public Pension Programmes a Tax on Employment?" *Economic Policy*, 2004. 19 (39): 267-311.
- Brittain, John A. "The Incidence of Social Security Payroll Taxes" *The American Economic Review*, 1971. 61 (1): 110-125.
- Lee, Youyuan "Fiscal Policies and Improvement Chinese Public Pension System" *Insurance Research and Discussion*, 2003. 10:33-35. (Original article is in Chinese)

[8] Public Pension and Labor Supply

- Blau, David and Rayan M. Goodstein "Can Social Security Explain Trends in Labor Force Participation of Older Men in the United States?" *Journal of Human Resources*, 2010. 45 (2): 328-363.
- *Stock, James H. and David A. Wise "Pensions, the Option Value of Work, and Retirement" *Econometrica*, 1990. 58(5): 1151-1180.
- Atalay, Kadir, and Garry F. Barrett "The Impact of Age Pension Eligibility Age on Retirement and Program Dependence: Evidence from an Australian Experiment" *Review of Economics and Statistics*, Forthcoming.
- Eric French "The Effects of Health, Wealth, and Wages on Labour Supply and Retirement Behaviour" *Review of Economic Studies* (2005) 72 (2): 395-427
- Coile, Courtney, and Jonathan Gruber, "Future Social Security Entitlements and the Retirement Decision," *Review of Economics and Statistics* 89 (2007), 234-246.

[9] Public Pensions and Economic Growth

Lambrecht, Stephane, Philippe Michel, and Jean-Pierre Vidal "Public Pensions and Growth" European

- Economic Review, 2005. 49 (5): 1261-1281.
- Feldstein, Martin S. "Rethinking Social Insurance" American Economic Review, 2005. 95(1): 1-24.
- *Attanasio, Orazio P., and Susann Rohwedder. "Pension Wealth and Household Saving: Evidence from Pension Reforms in the United Kingdom" *American Economic Review*, 2003. 93(5): 1499-1521.
- Steven F. Venti and David Wise "Have IRAs Increased U.S. Saving?: Evidence from Consumer Expenditure Surveys" *The Quarterly Journal of Economics*, 1990. 105(3):661-698.
- Orazio P. Attanasio and Agar Brugiavini "Social Security and Households' Saving" The Quarterly Journal of Economics (2003) 118 (3): 1075-1119.
- Andrew A. Samwick "Is Pension Reform Conducive to Higher Saving?" *Review of Economics and Statistics*, 2000. 82(2): 264-272

[10] Economic Reforms of Public Pension Systems

- *Shinichi Nishiyama and Kent Smetters "Does Social Security Privatization Produce Efficiency Gains?" *The Quarterly Journal of Economics*, 2007. 122 (4):1677-1719.
- Cremer, Helmuth and Pierre Pestieau "Reforming Our Pension System: Is It a Demographic, Financial or Political Problem?" *European Economic Review*, 2000. 44 (4): 974-983.
- Krueger, Dirk and Felix Kubler "Pareto-Improving Social Security Reform when Financial Markets Are Incomplete!?" *American Economic Review*, 2006. 96 (3): 737-755.
- Philippe Karam, Dirk Muir, Joana Pereira, and Anita Tuladhar "Macroeconomic Effects of Public Pension Reforms" *IMF Working Papers*, 2010.
- Disney, Richard "Crises in Public Pension Programs in OECD: What are the Reform Options?" *Economic Journal*, 2000. 110 (461): 1-23.

[11] Operations and Management of Public Pension Fund Investment

- *Yermo, Juan. "Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries" 2008. *OECD Working Papers on Insurance and Private Pensions*, No. 15. OECD Publishing
- Blundell-Wignall, A., Hu, Yu-Wei and Yermo, J. "Sovereign Wealth and Pension Reserve Fund Issues" *Financial Market Trends*, 2008. 1(94)
- Impavido, Gregorio "On The Governance Of Public Pension Fund Management" 2002. World Bank Policy Research Working Papers.
- OECD Pensions at a Glance 2013: Retirement-Income Systems in OECD and G20 Countries, 2014, OECD Publishing.

[12] Intervention of Government on Health Insurance Supply

- *Poterba, James M "Government Intervention in the Markets for Education and Health Care: How and Why?" *Individual and Social Responsibility: Child Care, Education, Medical Care, and Long-Term Care in America*, 1996. University of Chicago Press
- Wynand P.M.M. van de Ven and Frederik T. Schut "Universal Mandatory Health Insurance In The Netherlands: A Model For The United States?" *Health Affairs*, 2008. 27(3):771-781.

[13] Moral Hazard and Adverse Selection Problem in Public Health Insurance

- *Einav, Liran, Amy Finkelstein, and Stephen P. Ryan "Selection on Moral Hazard in Health Insurance" *American Economic Review*, 2013. 103 (1): 178-219.
- Feldman, Roger, Carlos Escribano, and Laura Pellisé "The Role of Government in Health Insurance Markets with Adverse Selection" *Health Economics*, 1998. 7 (8): 659-670.
- Liu, Xiangping, Danijel Nestic, and Tomislav Vukina "Estimating Adverse Selection And Moral Hazard Effects With Hospital Invoices Data In A Government-Controlled Healthcare System" *Health Economics*, 2012. 21(8): 883-901.

[14] Unemployment Insurance Programs

- *Anderson, Patricia M., and Meyer, Bruce "Unemployment Insurance in the United States: Layoff Incentives and Cross-Subsidies" *Journal of Labor Economics*, 1993. 11:S70-S95.
- Atkinson, Anthony B. and John Micklewright "Unemployment Compensation and Labor Market Transitions: a Critical Review" *Journal of Economic Literature*, 1990. 29:1679-1727.
- Blank, Rebecca M., and David E. Card "Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?" *Quarterly Journal of Economics*, 1991. 106(4):1157-1189.

[15] Economic Effects of Unemployment Insurance

- *Schmieder, Johannes F., Till Von Wachter, and Stefan Bender "The Effects of Extended Unemployment Insurance over the Business Cycle: Evidence from Regression Discontinuity Estimates over 20 Years" *Quarterly Journal of Economics*, 2012. 127 (2): 701-752.
- Chetty, Raj "Moral Hazard versus Liquidity and Optimal Unemployment Insurance" *Journal of Political Economy*, 2008. 116(2): 173-234.
- Fredriksson, Peter, and Bertil Holmlund "Improving Incentives in Unemployment Insurance: A Review of Recent Research" *Journal of Economic Surveys*, 2006. 20 (3): 357-386.

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research- oriented documents.	
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	
Our graduates will be skilled in team work and	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	
leadership.	2.2. Students will be able to apply leadership theories and related skills.	
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	
	3.2. Our students will practice ethics in the duration of the program.	
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	
5. Our graduates will be skilled in problem-solving	5.1. Our students will have a good understanding of fundamental theories in their fields.	
and critical thinking.	5.2. Our students will be prepared to face problems in various business settings and find solutions.	
	5.3. Our students will demonstrate competency in critical thinking.	

2.2 Course specific objectives

2.3 Assessment/Grading Details

Assessment task	Weighting	Due date
Class participation/attitude	10%	Every class
Problem sets	30%	TBA
Exam	35%	April 3rd Friday

Presentation (Team Project)	25%	Last week of the class
Total	100%	

Two problem sets will be assigned (before and after the exam). The first problem set weighs 15% and the second problem set does 15%. Submission after the announced deadline is graded as zero. The first problem set will be assigned as homework. The second problem set can be either homework or replaced with in class quiz instead of solving in home.

Exam will be held at the 3rd Friday of April in the class (3:30-5:20) as a way of assessing the learning goal 5. This will be a closed-book exam and any digital devices are not allowed to be used during the exam. For the sake of fair grading by testing with the exactly equal written exam (which weighs most among others) under the same environment, no exception for the examination date is allowed. If you have a time conflict with this midterm exam schedule, nottaking this course is strongly recommended.

Presentation (Team Project):

Instead of taking a final exam, how well you understand overall class materials will also be tested by a team project on an application of what is discussed in the class via 30 minutes' presentation in the last week of the 4nd module. This is for assessing the learning goals 1, 2, and 4. At most, by March the 13th, each team should be formed and list of team members should be submitted.

As long as relevant to the class, each team is free to choose the content of the presentation. Some examples will be offered in the middle of class, for reference.

By the 3rd Friday of April, short proposal of the presentation (up to six pages) is to be submitted. The presentation has to have clear research question, concrete research method, and accurate sources (citation). The outcome should be original not copy other's work. As a penalty for plagiarism, both the grade for team project (25%) and the grade for class participation (10%) will be zero, as a way of assessing the learning goal 3. By the same reason, as a penalty for cheating during the midterm exam, both the grade for midterm exam (35%) and the grade of class participation (10%) will be zero. Both misconducts will be reported to the PHBS Discipline Committee.

At the presentation in the last week of this module, each team should submit both the presentation slide (submission of the term paper is optional) and detailed document about each student's contribution (which part you did for presentation) for the sake of fair grading. Moreover, every member of each team should take part in presenting the team project outcome.

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar. For more information of plagiarism, please refer to PHBS Student Handbook.

3. Topics & Teaching Schedule

Week	Topics
1	Introduction of the Course
	Economics of Insurance Provision by Government
2	Post-Retirement Income Insecurity Facing a Rapid Demographic Change
	Defined Benefit Pension vs. Defined Contribution Pension
3	Unfunded Pension System (PAYGO system) vs. Funded Pension System
	Notional Defined Contribution System
4	Risk Sharing of Public Pension Systems
	Taxations on Pension
5	Public Pensions and Labor Supply (Retirement)
	Public Pensions and Economic Growth
6	Economic Reforms of Public Pension Systems
	Operations and Management of Public Pension Fund Investment
7	Closed Book In-class Written Exam
	Intervention of Government on Health Insurance Supply
8	Moral Hazard and Adverse Selection Problem in Public Health Insurance
	Unemployment Insurance Programs
9	Economic Effects of Unemployment Insurance
	Presentation (Team Project) or Final Exam