

Social Insurance

ECON 547, Fall (2nd module) 2014, Peking University HSBC Business School

Instructor: Insook LEE

Class Meeting: Tuesday & Friday 10:30a.m. -12:20 p.m.

Office Hours: Friday 12:30 p.m. -2:30 p.m. Friday or appointment by e-mail (islee@phbs.pku.edu.cn) at 743

Teaching Assistant: (TBA)

Course Description: 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 US. In addition to understanding social insurance, this course discusses economic effects of social insurance policies.

Prerequisite: Microeconomics 1 and Macroeconomics 1

Class Material: 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.

Learning Objective:

This course aims to have students achieve to obtain what follows.

[1] Professional knowledge about social insurance which is one of the important issues in the society that also can have bearing on students' own financial plans:

Learn deeper knowledge about governmental programs of social insurance — public pension program and unemployment benefit program, public health care program and comprehend economic analyses on them.

[2] Capacity to identify economic issues regarding governmental social insurance programs:

Applying the knowledge, learn to penetrate often complex problems regarding social insurance program of the government by identifying key economic factors, which is necessary for proper solution.

[3] Ability to conduct solid economic analyses on issues related to social insurance:

The knowledge and identification of key factors are ultimately paving ways for independently conducting logical economic analyses on various problems of social insurance.

Grading Policy:

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|-----------------------------|-----|
| Class participation | 10% |
| Problem sets | 30% |
| Midterm Exam | 35% |
| Presentation (Team Project) | 25% |

- Three problem sets will be assigned and each weighs 10%. Submission after the announced deadline is graded as zero.
- Midterm exam will be closed-book exam. For the sake of fair grading by testing with the exactly equal written exam (which weighs most among others), no exception for the examination date is allowed. If you have time conflict, then not-taking this course is recommended.
- Presentation (team project): Students form a team to make a presentation for final team project. The topic of the final project should be an application of what is discussed in the class, such as a case study of post-retirement income security in Chinese rural area. As long as relevant to the class material, each team is free to choose the content of the presentation, either theoretical or empirical research on specific topics in social insurance. Some specific examples will be offered in the middle of class, for reference. Just after midterm exam and before presentation, short proposal of the presentation (up to ten pages) is to be submitted for feedbacks. The presentation has to have a clear question, concrete methodology, and accurate sources (citation), letting along originality.

Course Schedule and Reading List:

| 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 |

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

Scholz, John Karl, Ananth Seshadri, and Surachai Khitatrakun. “Are Americans Saving “Optimally” for Retirement?” *Journal of Political Economy*, 2006. 114(4): 607-643.

*Poterba, James M. “Retirement Security in an Aging Population” *American Economic Review*, 2014. 104(5): 1-30.

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.