# Aging and Pension Reform in a Two-Region World: The Role of Human Capital

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13th Annual Joint Conference of the Retirement Research Consortium
August 4, 2011
Washington, DC

## *Discussion: Aging and Pension Reform in a Two-Region World: The Role of Human Capital*

- Overlapping Generations Model
  - Aging society → K:L ratio ↑
    - Rates of Return on Capital ↓
    - Wages ↑
- Add adjustments (1) human capital accumulation and (2) open economy.
- Two region model -- capital flows occur between two regions
  - "Old" : US (aging demographic least worst of group), Canada, Japan, Australia, New Zealand, Switzerland, Norway and EU15.
  - "Young" : all other countries
  - Overall demographic trends very similar btw "regions"; although strong level differences.

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- Welfare effects (also Macro Aggregates) under different State pension policy scenarios (pay-as-you-go system).
  - Benchmark Scenarios
    - Constant contribution rate → adjust (down) SS payments
    - Constant replacement rate → adjust (up) contribution rate
  - Benchmark with Pension Reform
    - Increase Statutory Retirement Age (from 65)
      - Working Longer
    - 1 year increase for every 1.5 increase in life expectancy

- Different Welfare Implications for different age cohorts and future generations

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- <u>Focus on Two Key Results</u>

  (1) Human capital accumulation can mitigate some of the negative welfare consequences of an aging society.

  (2) Increasing the retirement age has strong positive welfare effects.

  - Regardless of Benchmark Scenario
  - Incentives to invest in HC over the life-cycle ↑ because working longer.

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- The Paper's Implications for US Social Security reform
    1. Don't increase the disincentives to invest in human capital → Don't increase payroll taxes
    2. Increase the Full Retirement Age
- (1) Payroll Taxes?
    - Need to consider size of affected population and magnitude of increase – <u>disincentives may not be strong</u>.
    - Option 1: Increase taxable maximum earnings ($106,800)
        - Only about 6% of workers have earnings > tax max and only a subset would experience an increase in marginal payroll tax rate.
        - Not a pure tax – benefit payouts would also increase
        - Liebman and Saez 2006
    - Option 2: increase payroll tax rate
        - A small increase in payroll tax rate goes a long way: a 4 percent increase (6.2% to 6.45%) closes 25 percent of 75-year shortfall.

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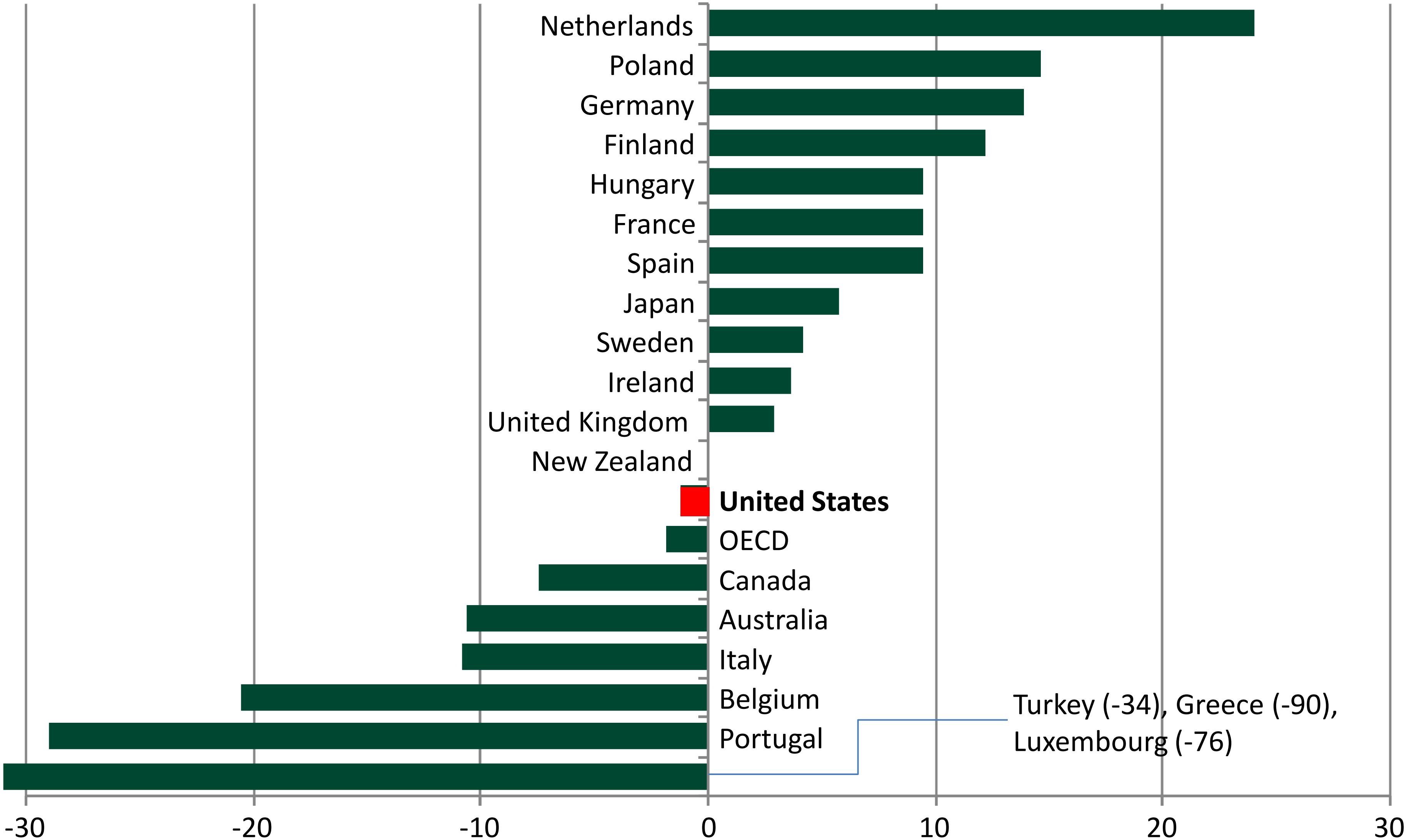
- The Paper's Implications for US Social Security reform
  1. Don't increase the disincentives to invest in human capital → Don't increase payroll taxes
  2. Increase the Full Retirement Age
- (2) Increasing Full Retirement Age?
  - Working Longer is key!
    - Requires desire to work longer and opportunities
      - **Policies must address both sides (supply and demand)**
    - Could get more responsiveness to FRA change if combined with other supply and demand changes.
      - Increase in FRA explains some of the increase in LFP among men 55-69 (Blau and Goodstein 2010).
    - Explore other changes to SS rules to increase work incentives
      - Soc. Sec. more or less neutral w/ respect to work incentives.

# Pension incentives to work/retire

*Change in pension wealth from working an additional year, between ages 60 and 65, per cent of annual earnings*




Source: Pensions at a Glance 2011, OECD (from Edward Whitehouse presentation)

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- Well developed paper with clear explanations of OLG model and modifications (especially for a novice like me).
- Interesting extension of model to pension policy.
- Explore opportunities for intergenerational redistribution
  - Like to see development of "alternative compensation mechanisms…"