

# Do Low Income Workers Benefit From 401(k) Plans?

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# Benefits from 401(k) Plans

- Tax-free accrual of income within plans
- Ability to defer tax on wages until retirement
  - MTR lower at retirement than when working
- High-income workers benefit more because:
  - Tax-exemption is worth more at higher MTRs
  - High-income workers have higher offer rates, participation rates, and contribution rates.



# DC Offer and Participation Rates Increase with Earnings

Percent of Workers Offered a Deferred Plan and Participation Rates Among Those Offered a Plan in 1997 by Own Earnings (\$2004)

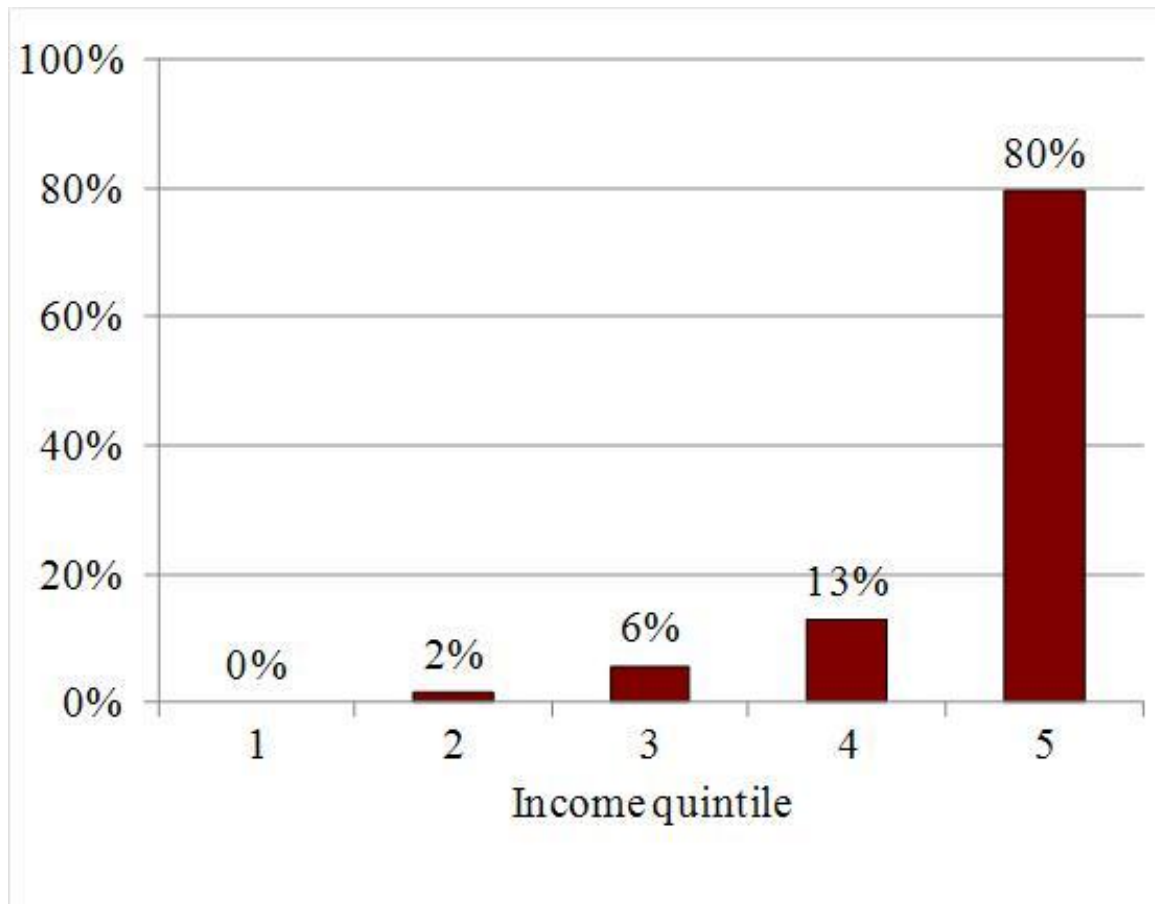


# Incidence of tax-free fringe benefits

- Traditional view: High-bracket workers gain more per dollar of fringe benefit
- This view assumes each dollar of benefit replaces a dollar of money wages for everyone



## Estimated Distribution of Tax Benefits from Qualified Pension Plans among Households, by Income Quintile from Toder, Harris, and Lim (2011)



# Incidence of tax-free fringe benefits

- But what if different employees place different values on the fringe benefit?
- Low-income workers may place less value on DC contributions than high-income workers
  - they would rather have wages to support consumption **now** rather than **later**
- Empirical issue – How do tax-free fringes affect the pre-tax distribution of money wages?



# Estimating Compensating Differentials

- Many studies estimate wages as function of:
  - Employee characteristics
  - Job characteristics
- Latter include fringe benefits, such as health and pension benefits
  - Coefficient on wages should be negative, but often isn't
  - One big problem is measuring worker quality – correlation between fringe benefits and unmeasured worker attributes
- Data set with earnings histories gives us a better measure of worker quality



# Why Employers May Contribute

- Higher combined contribution limits
- Encourage longer tenure
- Attract workers who are high savers
- Payroll tax exemption
- Non-discrimination rules





# Determinants of Employee Preferences

- Wages vs. retirement plan accruals
- Employer vs. employee contributions
- Why high-income workers would pay more in foregone wages:
  - Higher marginal income tax rates
  - Less financially constrained
  - More likely to see MTRs drop at retirement
  - Benefit more from OASDI tax exemption



# Objective

- Test whether employer contributions reduce earnings of low-income workers by less than they reduce earnings of high-income workers.
- Which arbitrage conditions apply?
  - Equalize costs to employers of retirement plan contributions and wages?
  - Equalize benefits to employees of retirement plan contributions and pre-tax wages?



# Methodology

- Estimate determinants of money wages for new employees
- Wages depend on:
  - Job characteristics
  - Measures of worker quality
- Separate equations for
  - Low and high-income employees
  - Male and female employees



# Statistic of Interest is the Slope

- Our major questions have to do with the comparative magnitudes of the **absolute dollar reduction in wages** associated with
  - access to pension plans,
  - additional employer contributions to pension plans.



# Data Sources

- 2004 and 2008 SIPP Panels Matched to DER
- SIPP data include:
  - Worker demographic characteristics
  - Job characteristics, including pension plan offer and type and employer contribution
- DER includes:
  - Earnings histories and job tenure (1978-2009)
  - Worker DC contributions (1990-2009)
- Sample is limited to new workers, age 30-60 with a prior job



# Determinants of Earnings

- Earnings higher for:
  - More educated
  - Whites relative to blacks (significant for men, not women)
  - Married relative to unmarried
  - Those with better self-reported health (larger effect for women than men)
  - Longer tenure in current job
  - Higher earnings in prior jobs
  - Unionized workers
  - Higher for women without young children

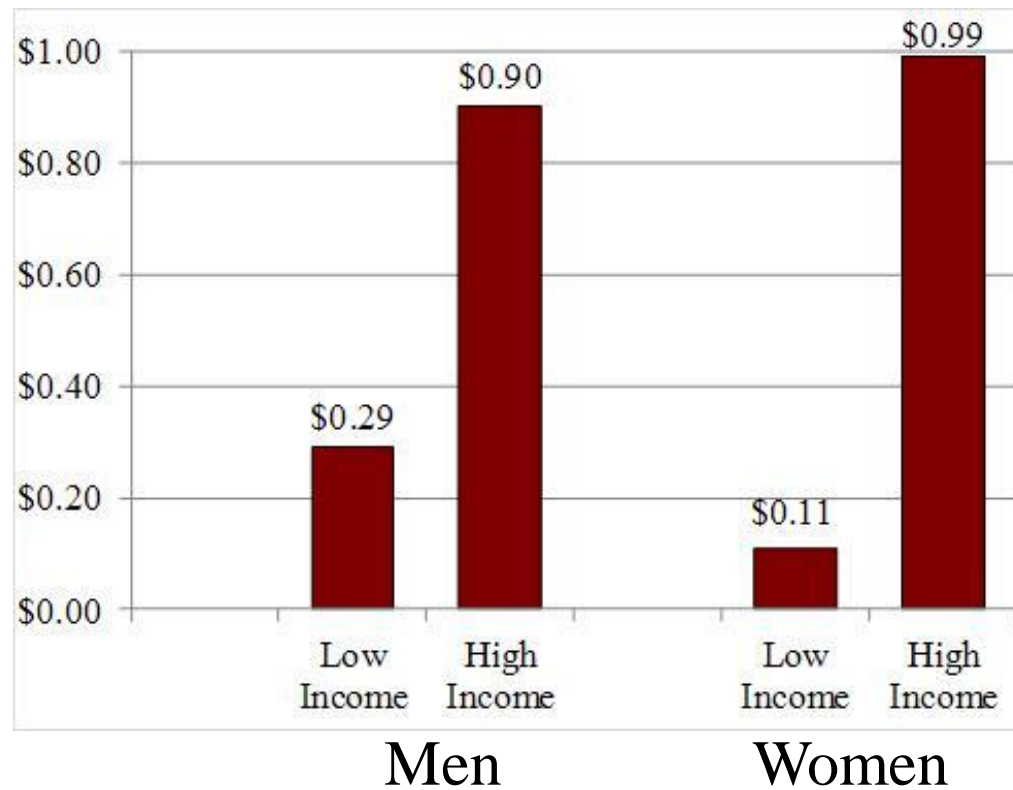


# Effect of Fringe Benefits

- Earnings vary positively with
  - Health insurance coverage
  - Availability of pension offer (DC or DB)
- Inconsistent with compensating differentials
  - Suggests market segmentation between covered and non-covered workers
- **But for workers with DC offer, wages do vary inversely with employer contribution per dollar of earnings**



# Reduction in Wages for an Additional Dollar in Employer 401(k) Contribution, by Gender and Income





# Conclusions

- Low-income workers value employer contributions to retirement saving less than high income workers.
- We estimate wages as a function of worker and job characteristics.
  - Estimates show employer DC contributions reduce wages more for low than high-income workers.
- Implies low-income workers benefit from tax breaks for retirement saving.

