

# **Human Capital Policies to Win the Race between Education and Technology**

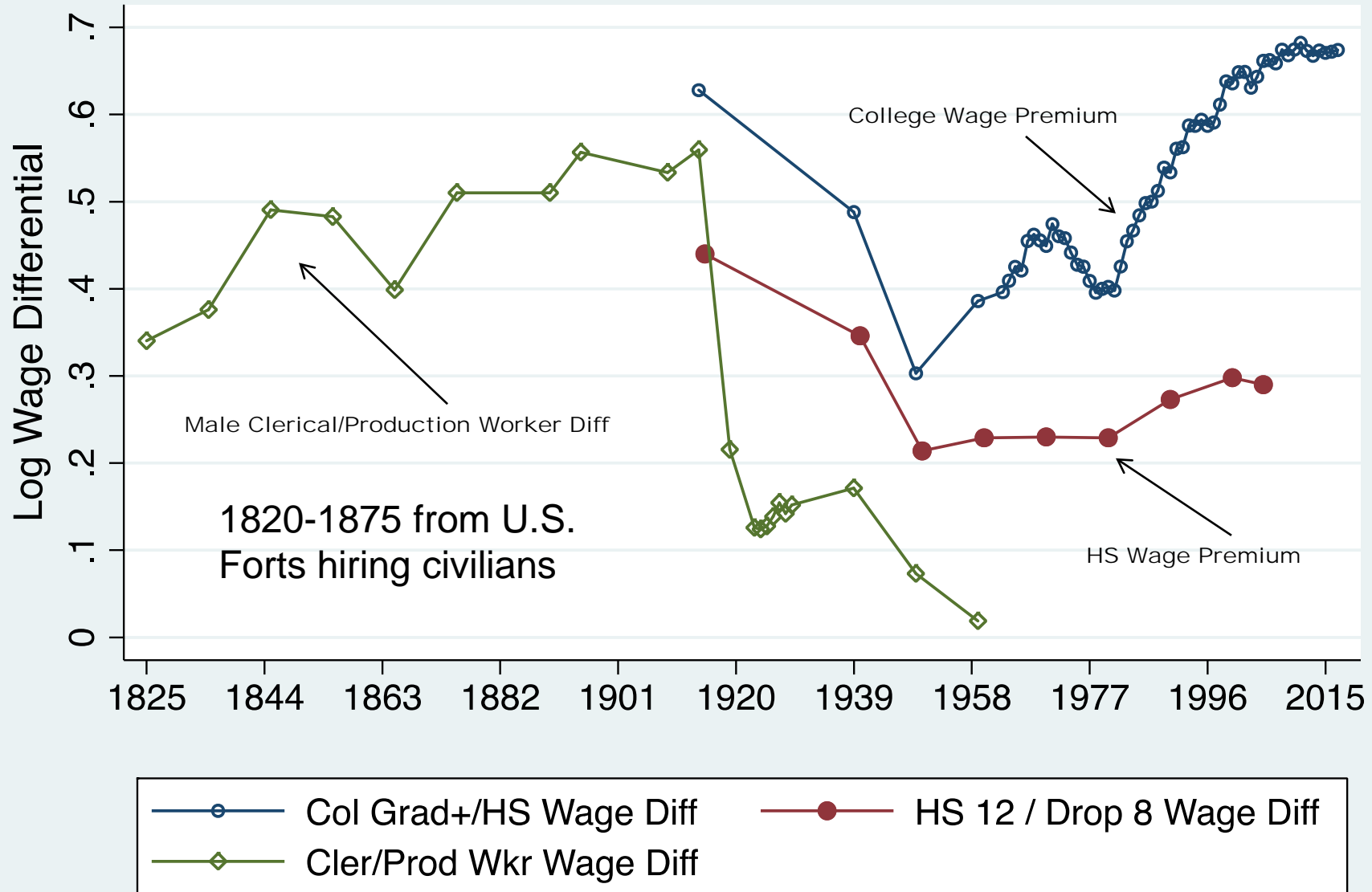
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October 17, 2019

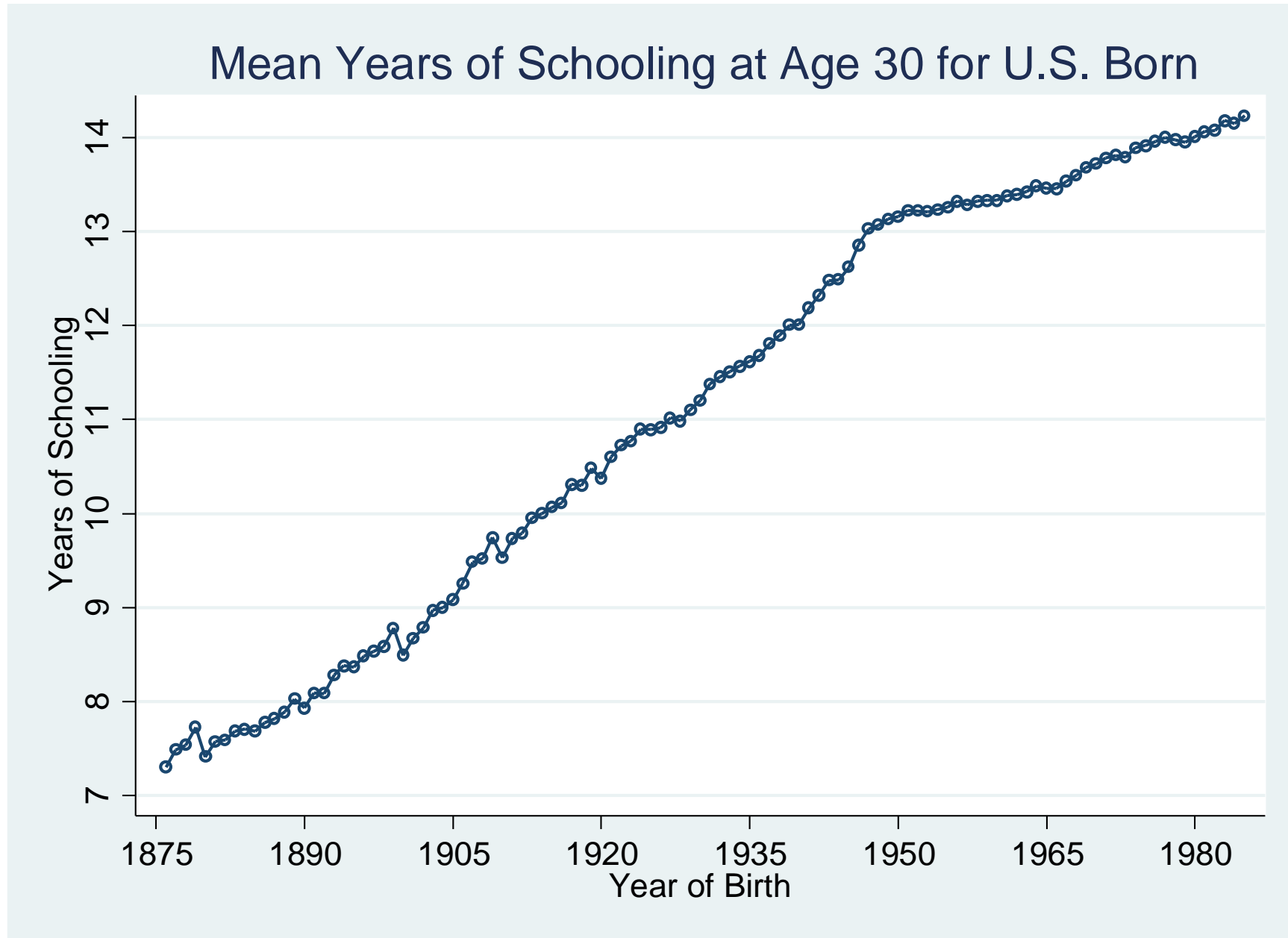
Conference on Rethinking Inequality Policies

# Education/Skill Log Wage Premia, 1825-2017



Sources: Katz-Margo (2014) and Goldin-Katz (2008 *RBET*; updated to 2017)

# The Human Capital Century: Schooling by Birth Cohort 1876 to 1985

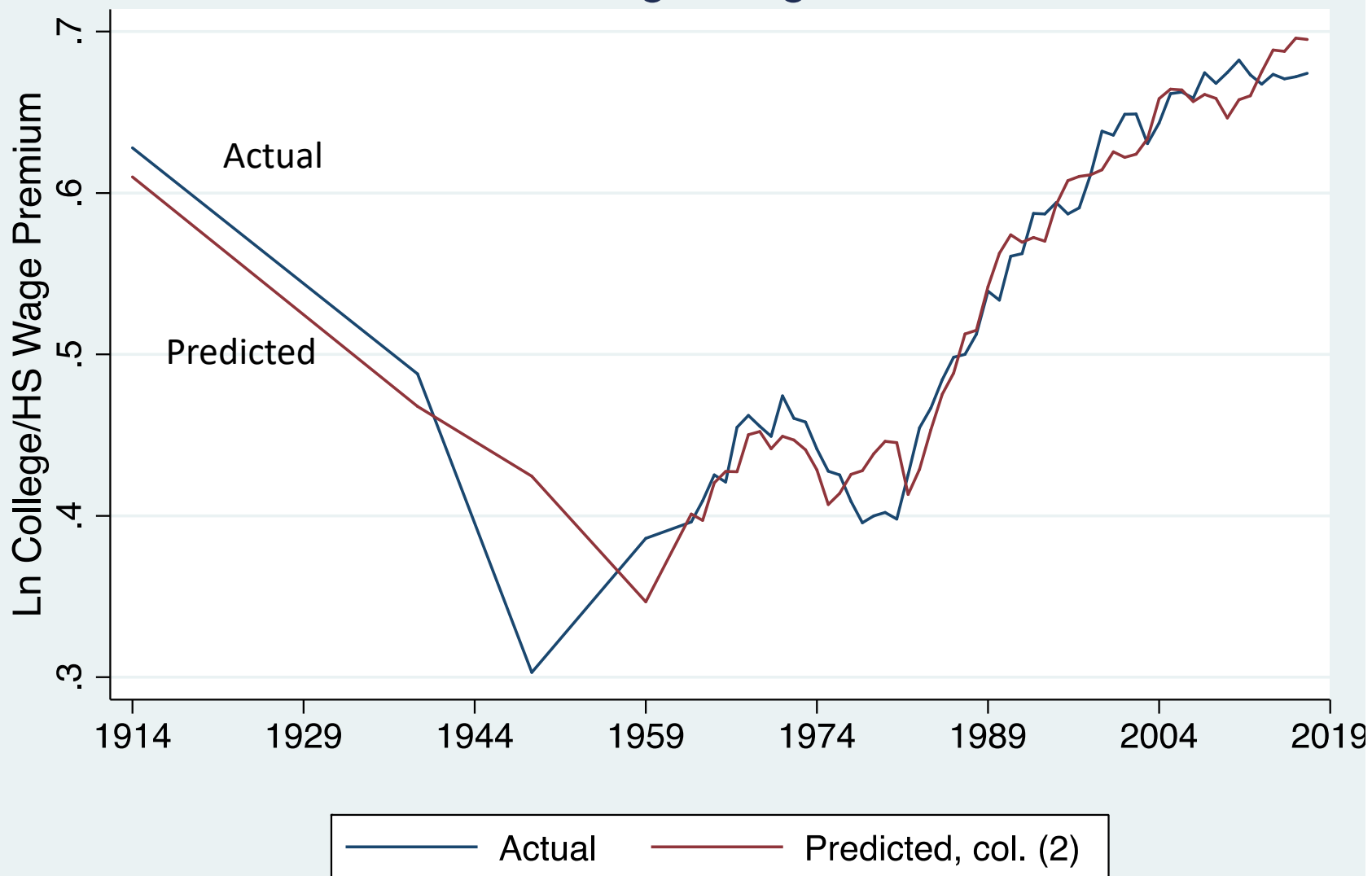


Source: Goldin and Katz (*RBET* 2008, updated to 2016)

# Rising Education/Skill Differentials from *The Race Between Education and Technology*

- (1) Rapid Secular Growth in Demand for Skills from Skill Biased Technological Changes (Computerization, AI most recent drivers)
- (2) Variation in rate of growth of supply of skills is a key: acceleration around 1910 with HS movement and deceleration post-1980
- (3) Rise in College Wage Premium since 1980 from Slowdown in Skill Supply Growth from Slower Growth of Education Attainment of the U.S. Born for post-1950 Birth Cohorts; Immigration minor role
- (4) Change in Nature of Skill Demand Shifts: Impact of computers and offshoring on labor market is more subtle than monotonic SBTC view – manual vs. routine vs. abstract tasks – **polarization of labor demand** and rising returns to “**social skills**”

# Actual vs. Predicted College Wage Premium, 1914 to 2017



Source: Goldin and Katz (*RBET* 2008; updated to 2017)

# Importance of Rising Returns to Education

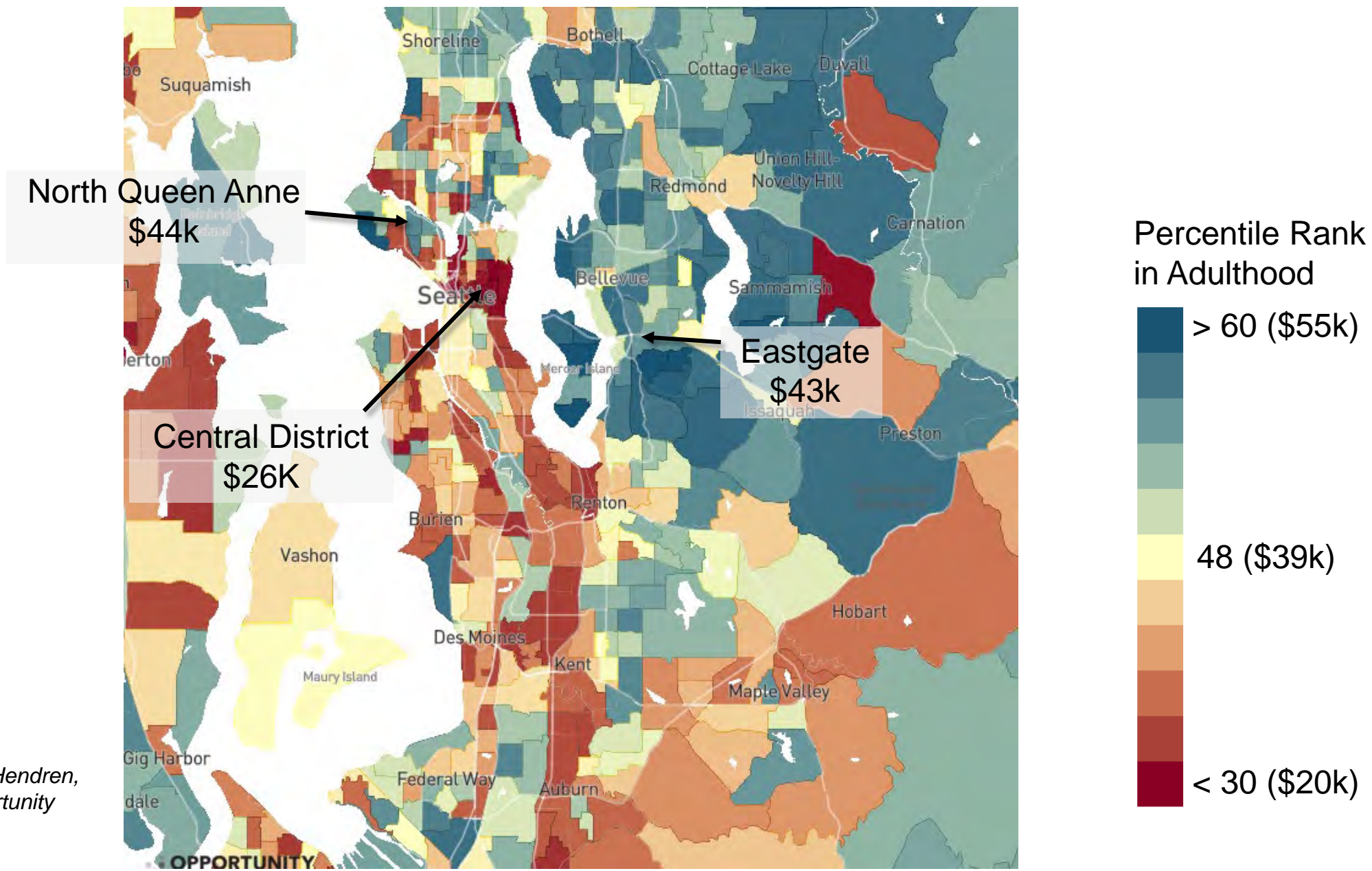
- Returns to Education Rise and “Convexify” from 1980 to 2017
  - Returns to Year of K-12: Stagnant .063 to .063
  - Returns to Year of College: Increase from .076 to .141
  - Returns to Year of Post-College: Increase from .073 to .175
- Increased Returns to Schooling (entirely from increased returns to Post-Secondary Schooling) explain .070 (**57 percent**) of the actual increase in hourly wage variance of .123 from .250 in 1980 to .373 in 2017 using the 1979-81 and 2016-18 CPS MORG samples
- Two Major Components of Increase in U.S. Wage Inequality since 1980:
  - (1) Increased returns to post-secondary schooling
  - (2) Rising Wage Inequality Among the College Educated (especially rise of Top 1%)

## Four Facts on Neighborhoods and Economic Opportunity

1. Children's prospects for upward income mobility vary substantially across neighborhoods; rising residential economic segregation in U.S.
2. Moving to better neighborhoods earlier in childhood improves children's outcomes in adulthood significantly
3. Low-income families who receive housing vouchers currently live predominantly in low-opportunity neighborhoods and patterns are only partially explained by rental difference across neighborhoods
4. Housing mobility interventions can lead more low-income families to live in high-opportunity areas and improve children's long-run outcomes (MTO and CMTO)

## Example: The Geography of Upward Mobility in Seattle

Average Income at Age 35 for Children with Parents Earning \$27,000 (25<sup>th</sup> percentile)

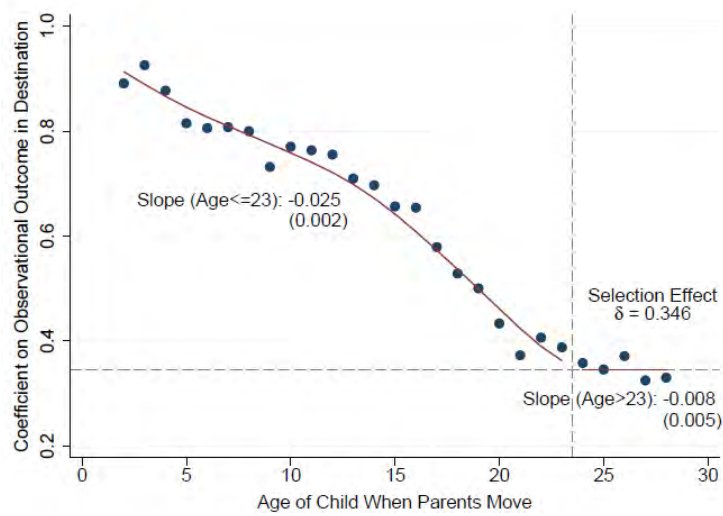


Source: Chetty, Friedman, Hendren, Jones, Porter (2018), Opportunity Atlas



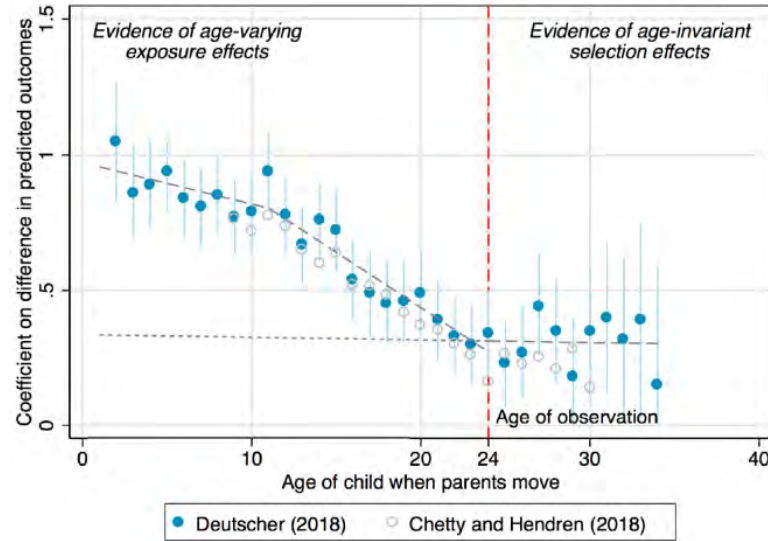
# Estimates of Childhood Exposure Effects

## United States



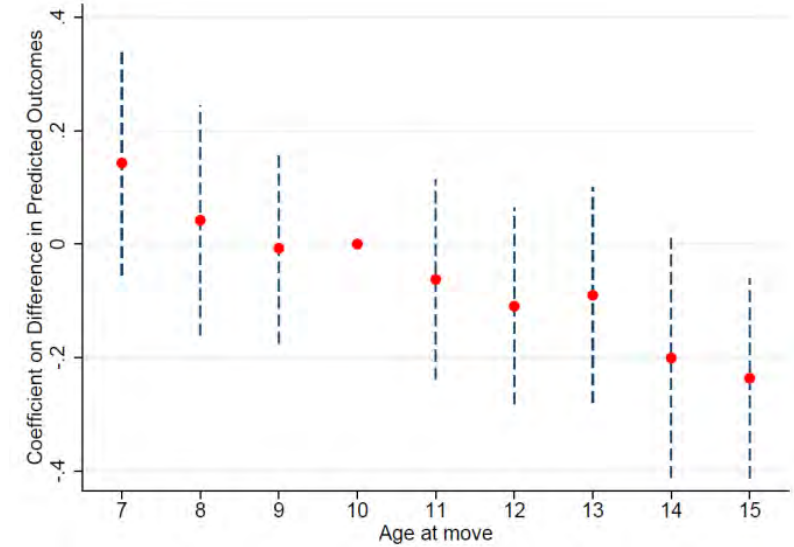
Source: Chetty, Friedman, Hendren, Jones, Porter (2018)

## Australia



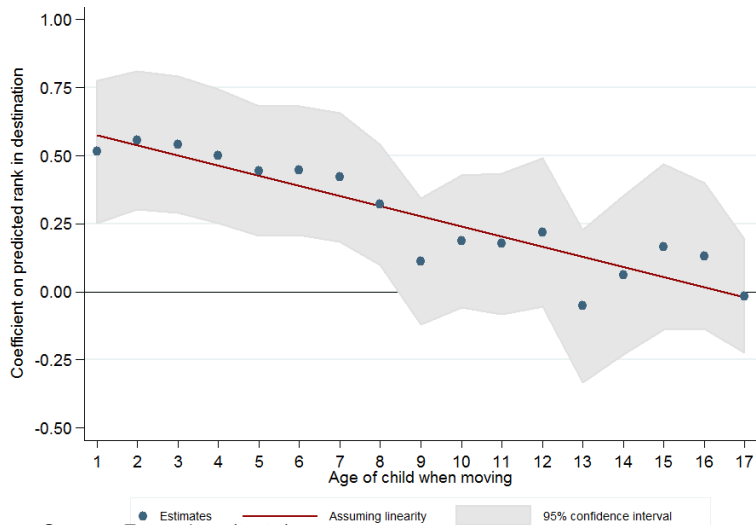
Source: Deutscher (2018)

## Montreal, Canada



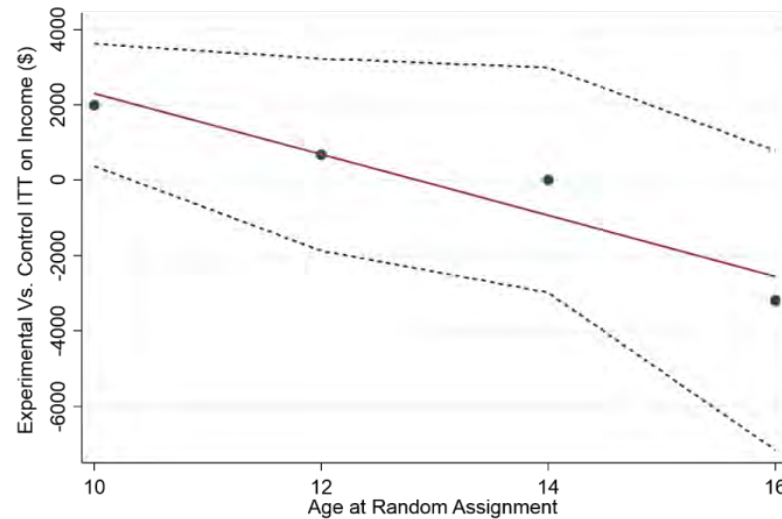
Source: Laliberté (2018)

## Denmark



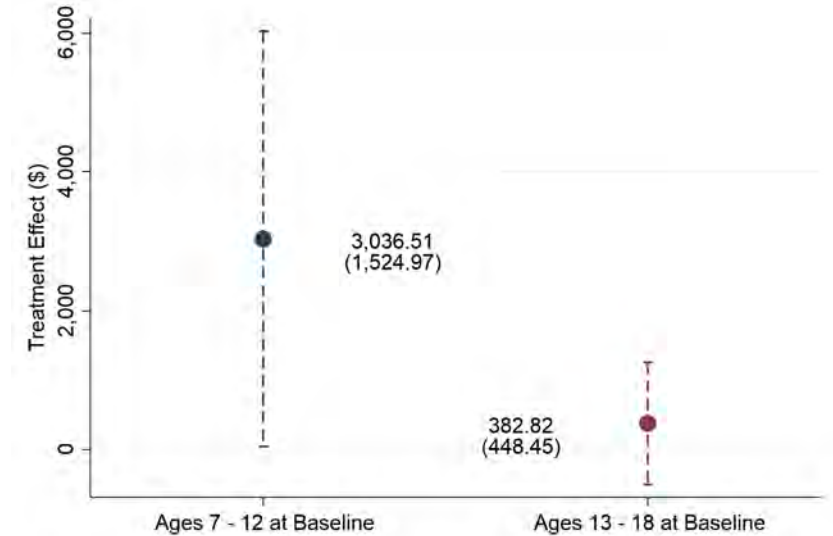
Source: Faurschou (2018)

## MTO: Baltimore, Boston, Chicago, LA, NYC



Source: Chetty, Hendren, Katz (AER 2016)

## Chicago Public Housing Demolitions

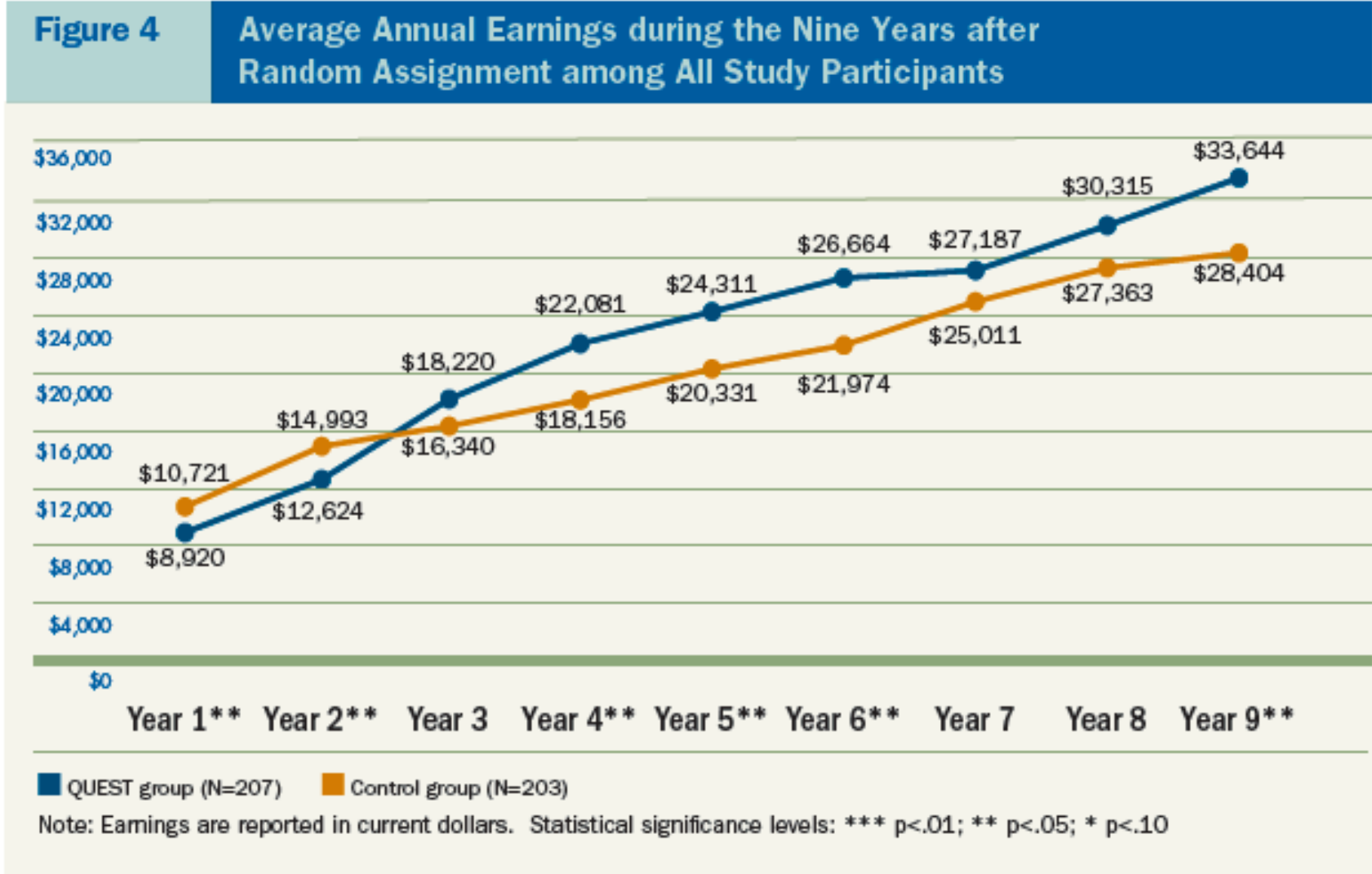


Source: Chyn (AER 2018)

# Shovel-Ready Human Capital Policies for Fostering Upward Mobility with RCT Evidence

- Universal High-Quality Early Childhood Education & Investments in High Mobility Community Colleges and 4-Year Public Universities (e.g., ASAP Program)
- Training Programs with encouraging evidence from 7 RCTs (P/PV, MDRC WorkAdvance, Project Quest) showing 20 to 40 percent earnings gains persisting to 9-years out so far
- H1-B Type programs for U.S. High-Poverty Areas for Talent Discovery, Occupational and Soft Skills Training, Placement/Internships (such as Year-Up)
- Expanding Housing Choice Vouchers for Families with young children combined with CMTO Services

Elliott and Roder (2019): Project Quest RCT Evaluation in San Antonio, TX  
N=410 (207 treatment and 203 control) -- 90% female, 74% Hispanic -- \$5000  
Per year (20%) earnings boost at 9 years out



Fein and Hamadyk (2018), Abt Associates PACE Study

Year-Up Evaluation RCT +53% (+\$1895 per quarter) in Quarters 6 & 7

+40% (+\$7011) in Year 3 – tripled share earning \$15 or more (15 to 45%) at 18 mths

**Exhibit 6-2: Impact on Average Earnings in Successive Follow-Up Quarters**

Average Quarterly Earnings (\$)

