
How Effective Are Workforce Development Programs? Implications for U.S. Workforce Policies

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Conventional wisdom on workforce development

“We simply lack any evidence that workforce development programs work.”

— Former Assistant Secretary of Labor for Employment and Training, Emily Stover DeRocco, *The Wall Street Journal* (July 2005)

“[W]hile training may be an effective strategy for modestly improving the earnings of a small number of workers, even the best-run training programs cannot provide a stepping-stone out of poverty for any significant numbers of Americans.”

—Gordon Lafer, *The Job Training Charade* (2002, p. 90)

“The best available evidence indicates that public training programs are an inefficient transfer mechanism and an inefficient investment policy for low-skilled adult workers.”

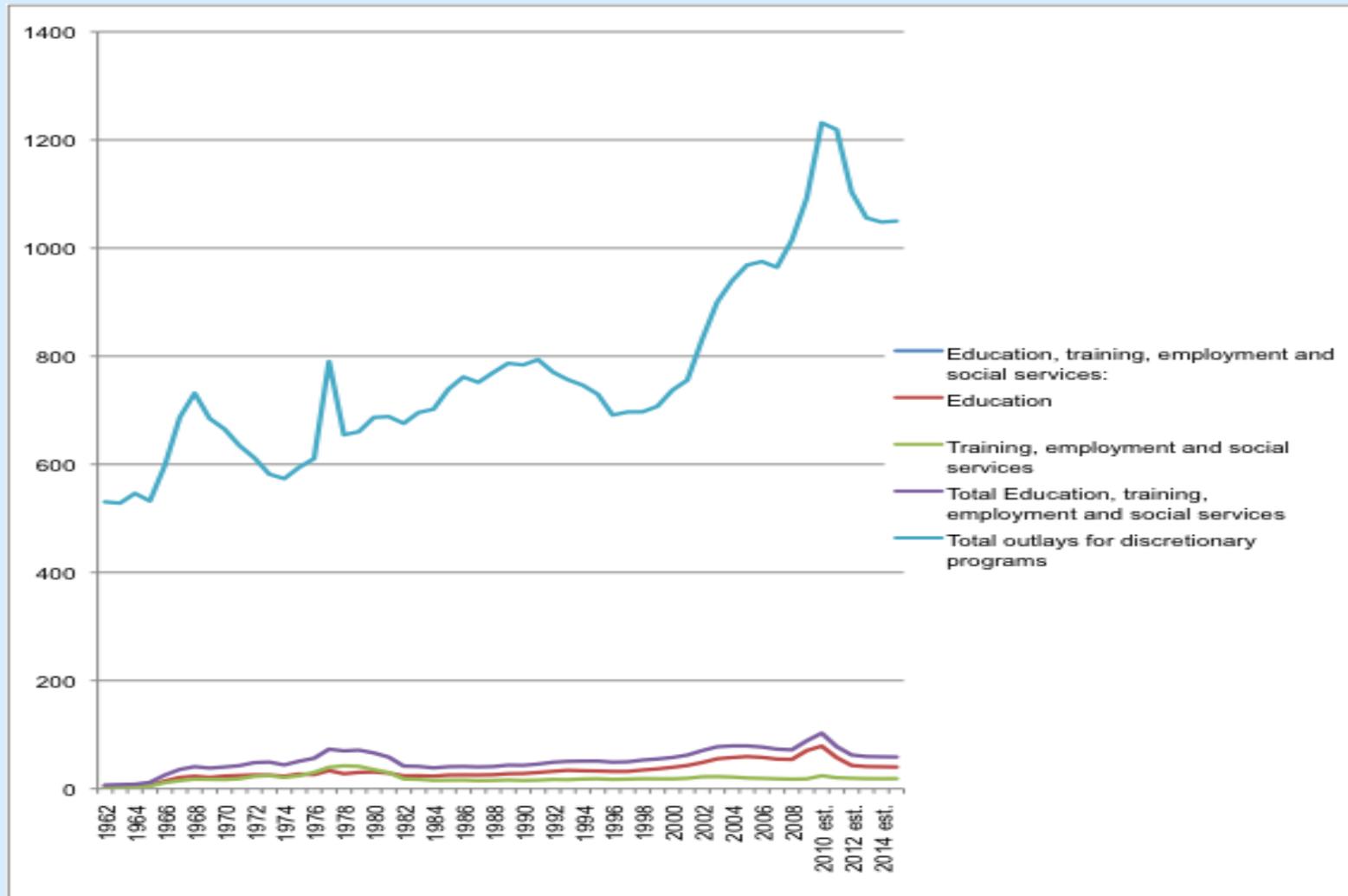
—Nobel Laureate James J. Heckman, “Human Capital Policy” (2003, p. 183)

Do Workforce Investment Act (WIA) appropriations reflect the conventional wisdom?

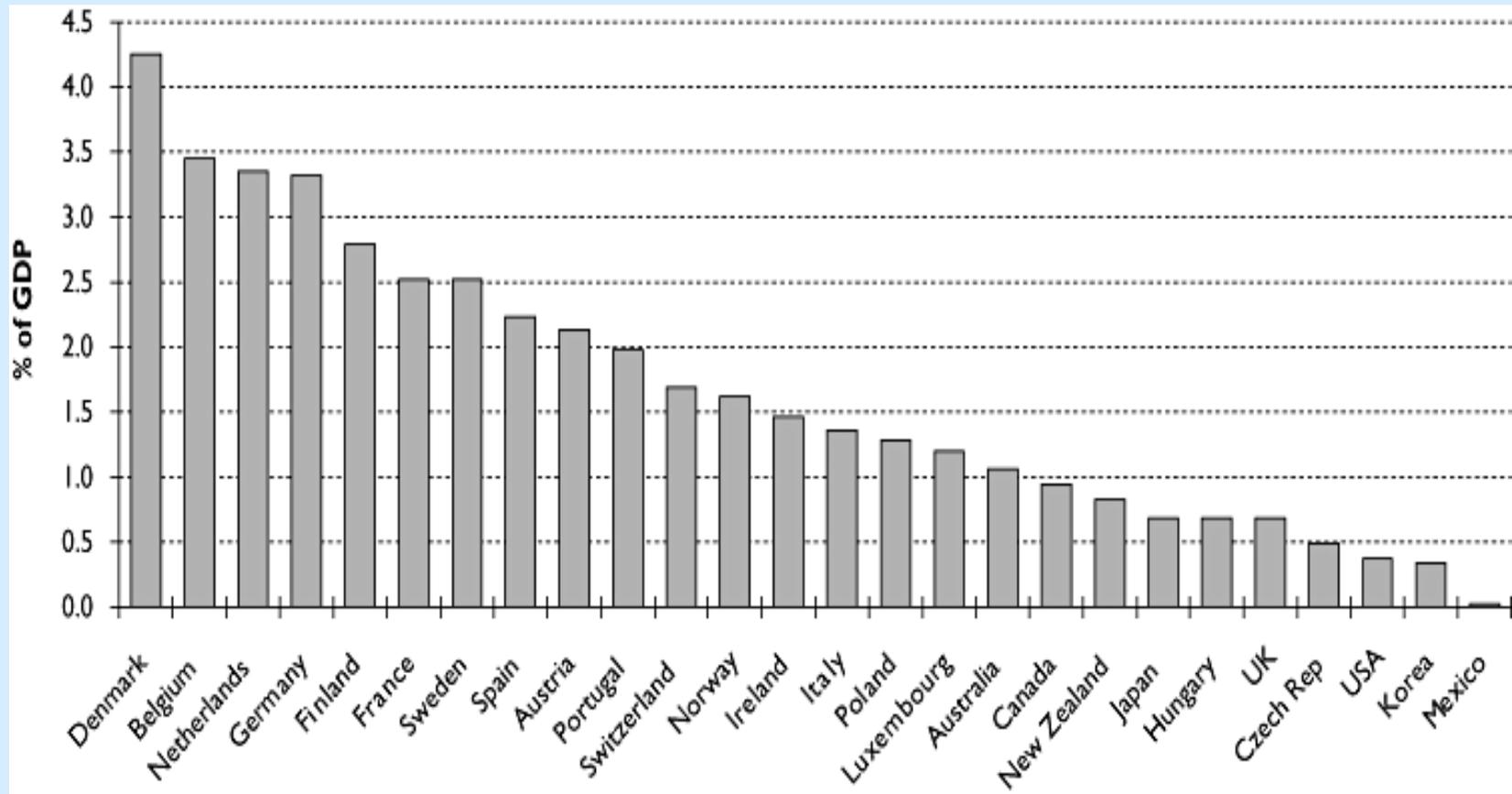
- Federal appropriations for WIA, adult education and related programs (Function 504 of the federal budget) have declined markedly in past few decades in real terms
 - Total FY 2007 U.S. federal government appropriations for WIA programs were \$4.4 billion, down 18% since FY 2005
 - After the 2009-2010 ARRA spike, appropriations for FY 2011 dropped below pre-ARRA levels

Outlays for discretionary programs in constant FY 2005 dollars, 1962-2015

Source:
Budget for
the US for
Fiscal Year
2011,
Historical
Tables



Labor market policy expenditure as share of GDP (2005): US ranks very low



Contesting the conventional wisdom

- We argue that the negative conventional view stems largely from misguided readings of the evidence and limited information or misinformation
- We attempt to rebut this view through a careful review of how we measure workforce development program impacts and performance and of findings in the literature on program effectiveness

Four main rebuttal arguments

- Measurement of workforce development policy impacts has been too narrow in comparison with evaluations of other interventions
- Reviews of program performance/impacts have given too little attention to adequate follow-up periods for evaluation
- Some workforce development evaluations have made unfair comparisons or interpretations of comparative program effectiveness
- Positive impact findings have been largely neglected in policy discussions and the press

Overview of workforce development programs

Six main “buckets” of system according to Osterman (FY 2005 budget amounts)

- ❑ WIA programs for disadvantaged adults (\$1.5 B);
- ❑ WIA and Trade Adjustment Assistance for dislocated workers (\$1.6 B);
- ❑ Adult basic education (ABE) programs (\$2.1 B including state reported matching funds);
- ❑ Community and technical college programs (\$1.2 B, federal Perkins funding; totaling \$12 B - \$20 B including state and local contributions);
- ❑ State-funded training for incumbent workers (\$270 M);
- ❑ Employment Service/one-stop system supported largely by WIA to fulfill job-matching function (\$0.9 B)

Employers spent more than \$109 billion on formal workplace learning—OJT, customized training, tuition assistance, etc.—in 2005

U.S. workforce development: one of the most studied systems

One of the most mature and longest-running performance measurement systems of any federal program

- ❑ Federal law mandated performance standards in the 1970s nearly a decade before Congress called for them to be applied to other programs
 - Systematic data collection at all levels
- ❑ Randomized experimental evaluation of Job Training Partnership Act (JTPA) program in mid-1980s
 - Produced information on JTPA program impacts and for assessing effectiveness of performance measurement systems in approximating impacts
- ❑ Nonexperimental evaluations of WIA in 2005 & 2008

Workforce development has been a relatively easy target for critics largely due to its transparency and openness

Outcomes and impacts measured in workforce development evaluations

Outcome and impact measures appropriately, but narrowly, have focused primarily on employment and earnings

- Of 17 performance measures used in WIA and JTPA, 10 are employment or earnings outcomes (i.e., entered employment rates, retention rates, average earnings or earnings changes), while 3 measure both employment and credentials attained
- Reflecting USDOL objectives, most workforce development program evaluations have also almost exclusively looked at employment and earnings outcomes

Abbreviated summary of the evidence

Impacts generally larger for women

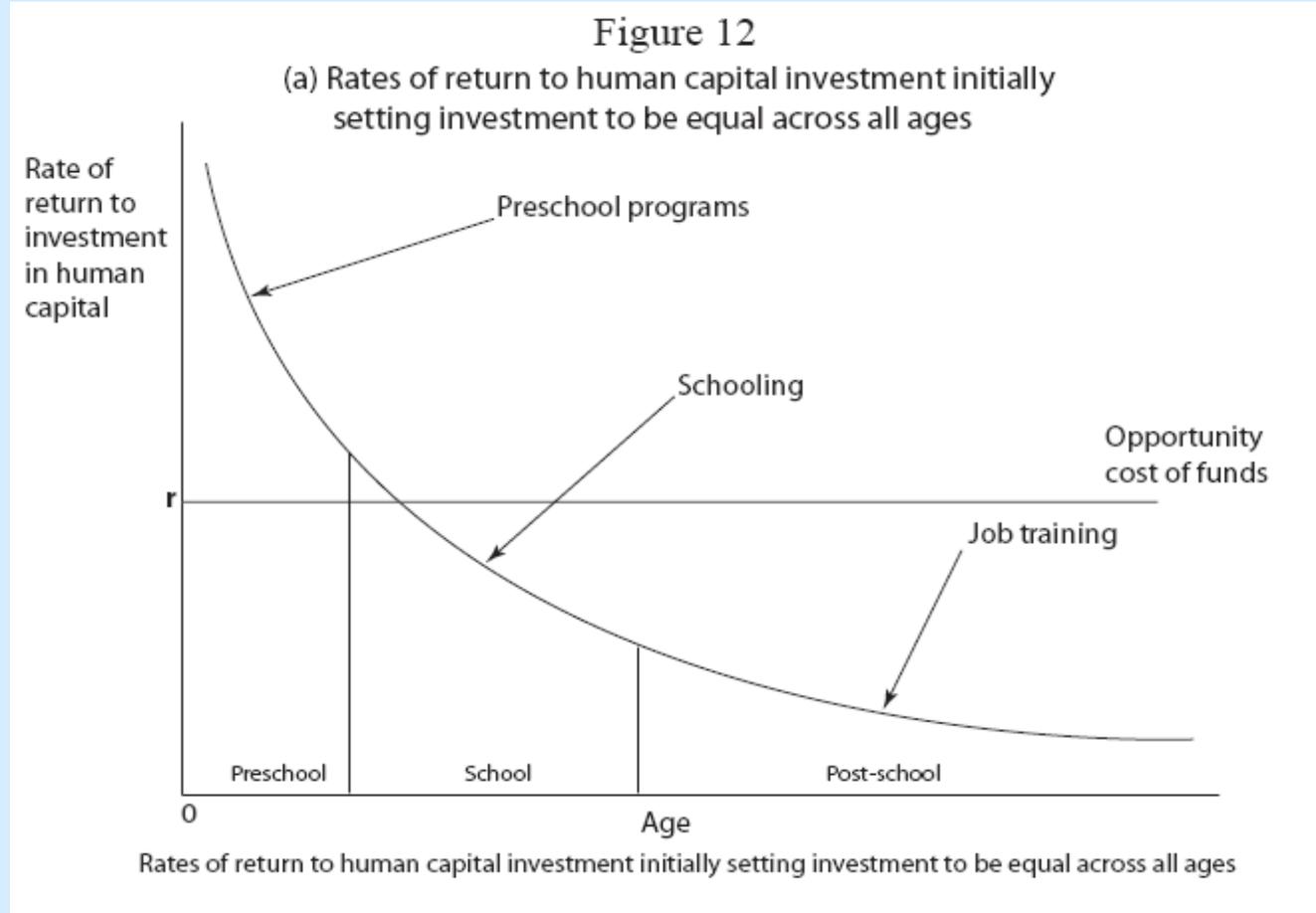
- National JTPA Study: \$533 annually for classroom training to ~\$1,500 annually for OJT/job search assistance (2001 dollars); mean per-participant earnings impact for adult women in JTPA was \$1,236 annually
 - Per-participant earnings impacts even larger for welfare women (\$3,580 annually)
- WIA nonexperimental evaluation estimated average increment in earnings of nearly \$2400 per year (~26% of average earnings)

Evidence ...

- Earnings impacts for adult men in National JTPA Study (measured on a per-participant basis): \$1,329 for classroom training, \$1,641 for OJT/JSA, and \$1,249 overall
- WIA nonexperimental evaluation: estimated impact of ~\$1700 or 15% of average earnings
- Appreciably lower earnings gains for dislocated workers (Hollenbeck & Huang, 2006; Hollenbeck et al. 2005; and WIA nonexperimental evaluation, Heinrich et al., 2008)

Why the negative appraisal in the face of generally positive evidence?

James J. Heckman: spending on public training programs is an inefficient use of public resources



Flawed impact comparisons across human capital investment programs

- Crime reduction (reductions in victim, criminal justice system and incarceration costs) were major factors contributing to estimated positive net benefits of early childhood programs (Perry Preschool, Head Start)
- Benefits associated with crime reduction have not been estimated in any larger-scale evaluations of adult and only a few youth employment and training programs (e.g., Job Corps)
 - National JTPA Study estimated earnings impacts for youth with a prior arrest, but not potential effects in reducing criminal activity or youth delinquency

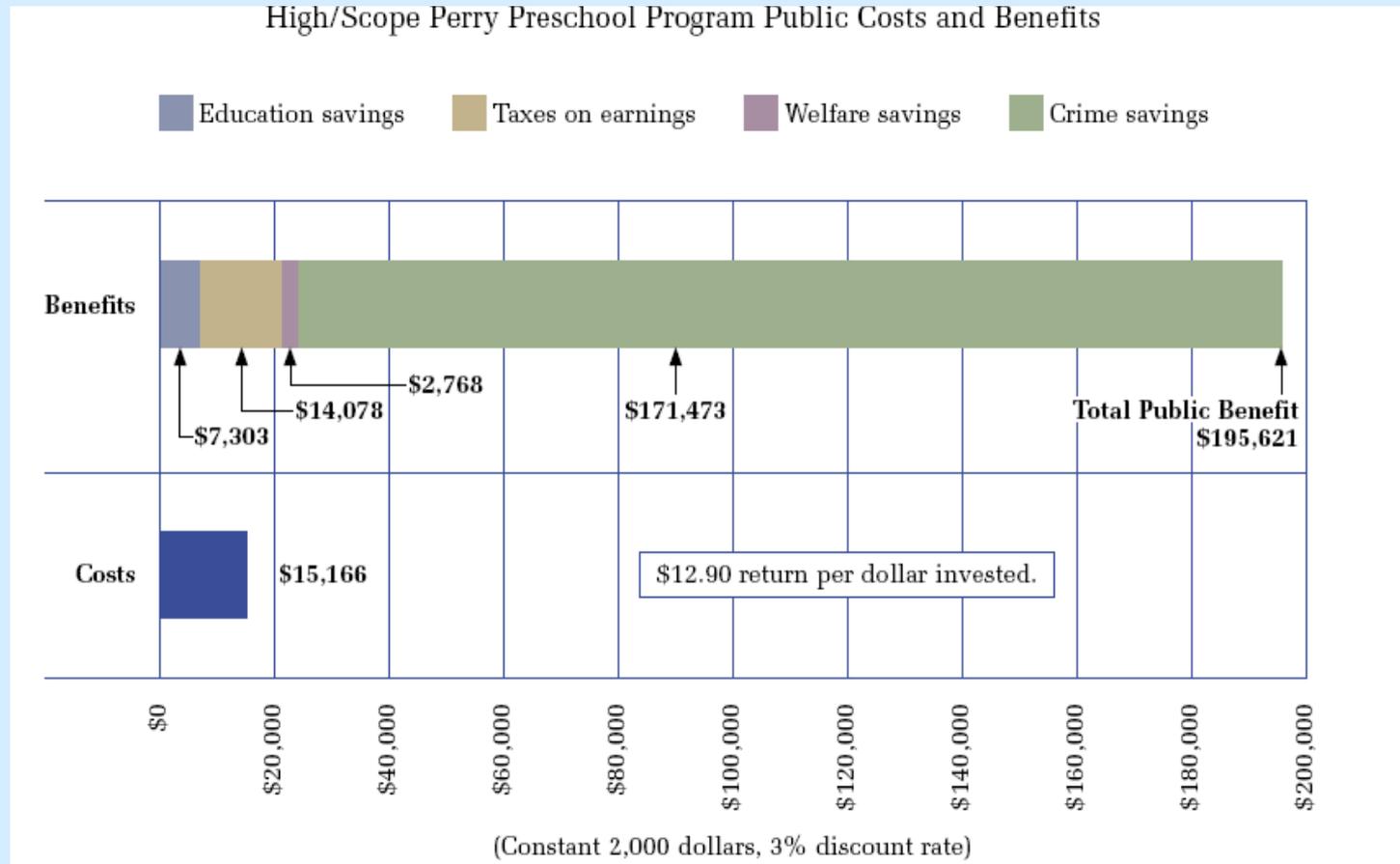
Wider range of impacts measured in other programs

- Other outcomes measured in Perry Preschool evaluation included: marital status, pregnancy (out-of-wedlock births) and scholastic and socioeconomic status/success measures such as special education participation, grade point average, grade retention, test scores, high school graduation, receipt of public assistance, home and automobile ownership, household income tax revenues
- Cost-benefit analyses of Perry Preschool program extrapolated measures of earnings to calculate *lifetime* earnings gains from participation, in addition to the associated tax contributions and reductions in public assistance

This has rarely been done in workforce development evaluations.

Contributions of components to Perry Preschool impacts

If benefits were only measured by earnings, conclusions about the Perry Preschool program's cost-effectiveness would be very different.



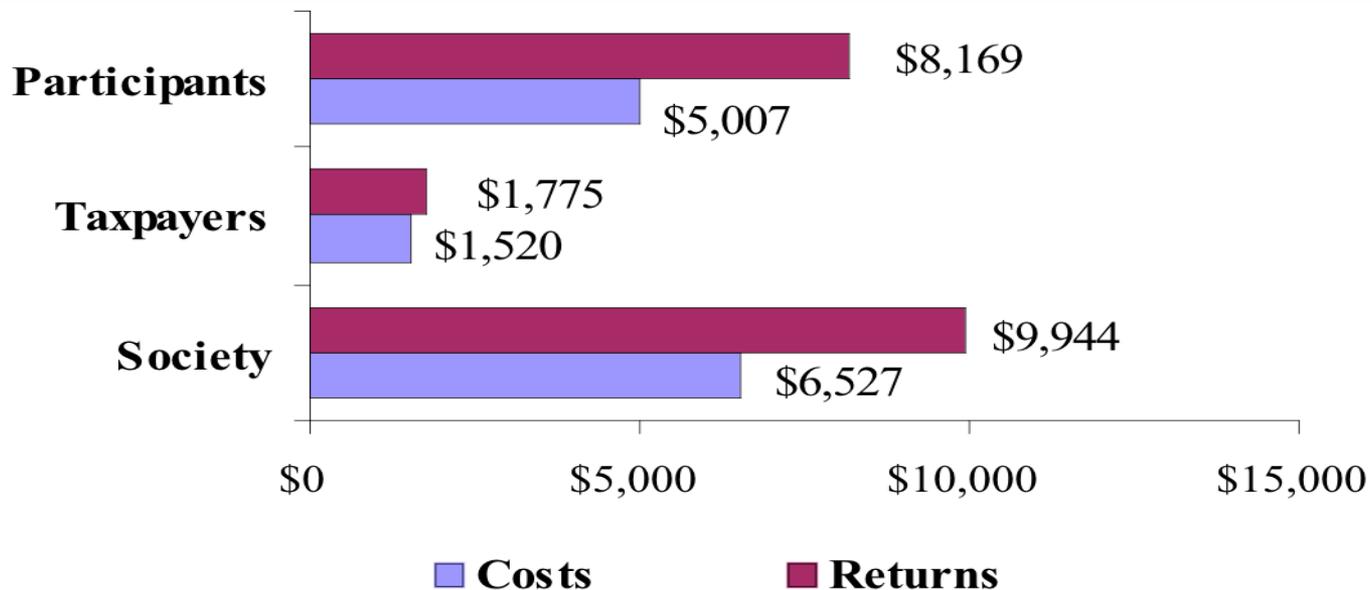
Schweinhart et al., 2005

Individual participants are rarely the sole beneficiaries of workforce investments

- Investments in adults also contribute to increases in economic growth and productivity as well as profitability for employers
 - Griliches (1997): education and human capital investments may have contributed to as much as one-third of increased growth in U.S
- Failing to account for potential benefits to employers, taxpayers and society shortchanges our valuation of these programs and likely explains a considerable part of the large (suggested) differences in the returns to early education vs. human capital investments for adults

Incorporating returns to employers and others can generate sizeable workforce ROI estimates

Estimated 5-year Costs & Returns for Texas Workforce Investments



Source: C. King et al., 2010.

Short-term vs. longer-term measurement of program impacts

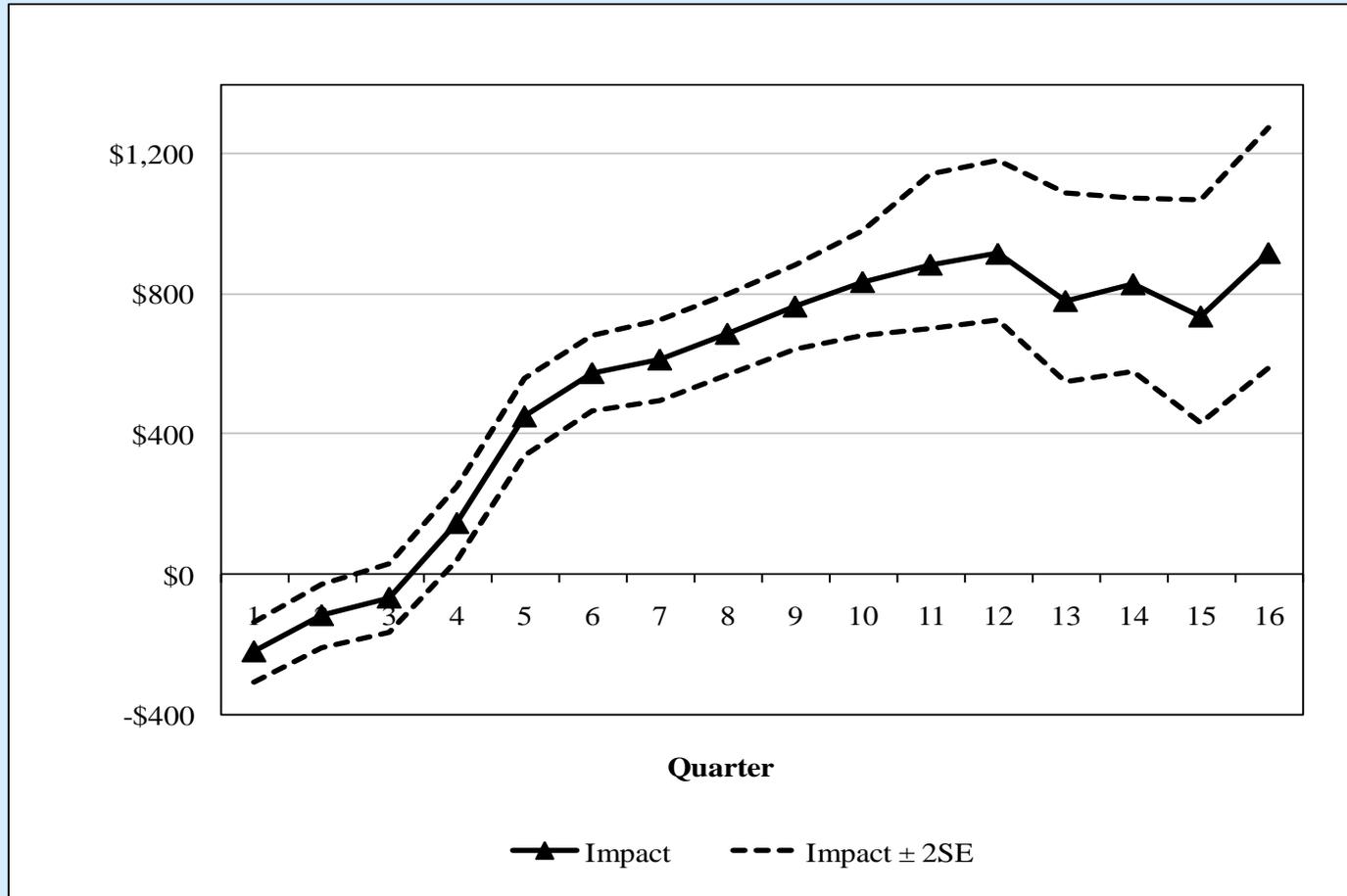
- Spending on young children clearly has a longer horizon over which to produce benefits relative to spending on adults
- Yet impacts of workforce development programs are frequently measured over timeframes much too short to capture results of more intensive skill investments
 - Latest Perry Preschool impact evaluations cover a follow-up period spanning more than 3 decades
 - Only in more recent analyses of workforce development program impacts have longer timeframes (4-10 years) been examined

Short-term evaluations miss more intensive skills training impacts

Growing number of studies show training impacts typically turn positive in 2nd or 3rd years

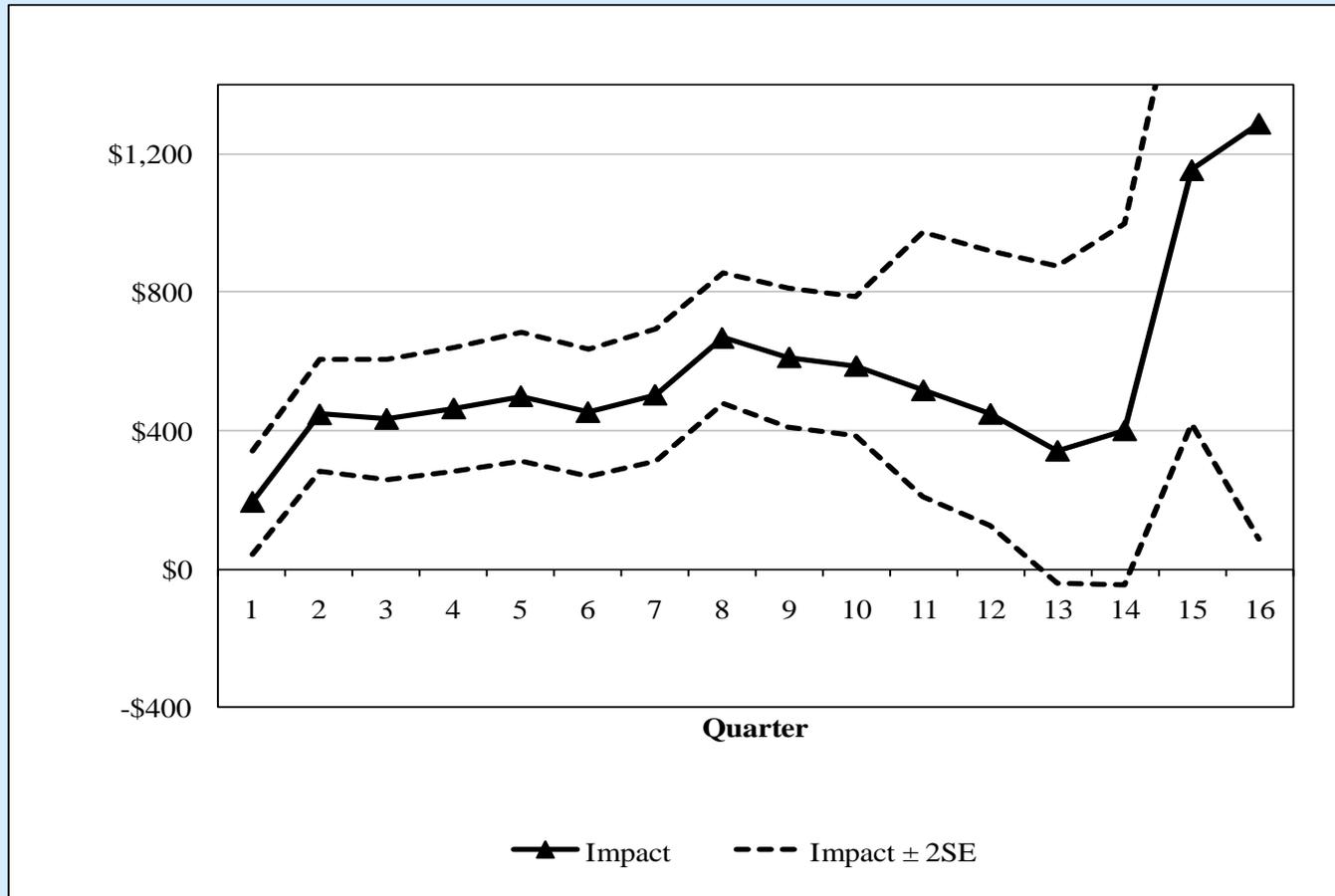
- “Lock-in effects” in first year generate initial negative impacts
- Dyke et al., 2006; Hotz et al., 2006; Card et al. (2009) meta-analysis of 199 active labor market programs worldwide; Hollenbeck et al. (2005) and Heinrich et al. (2008) nonexperimental evaluations of WIA program impacts; Smith et al. (2011) nonexperimental evaluation of Capital IDEA’s sectoral training

Quarterly Earnings Impact for Females, WIA Training versus Comparison Group



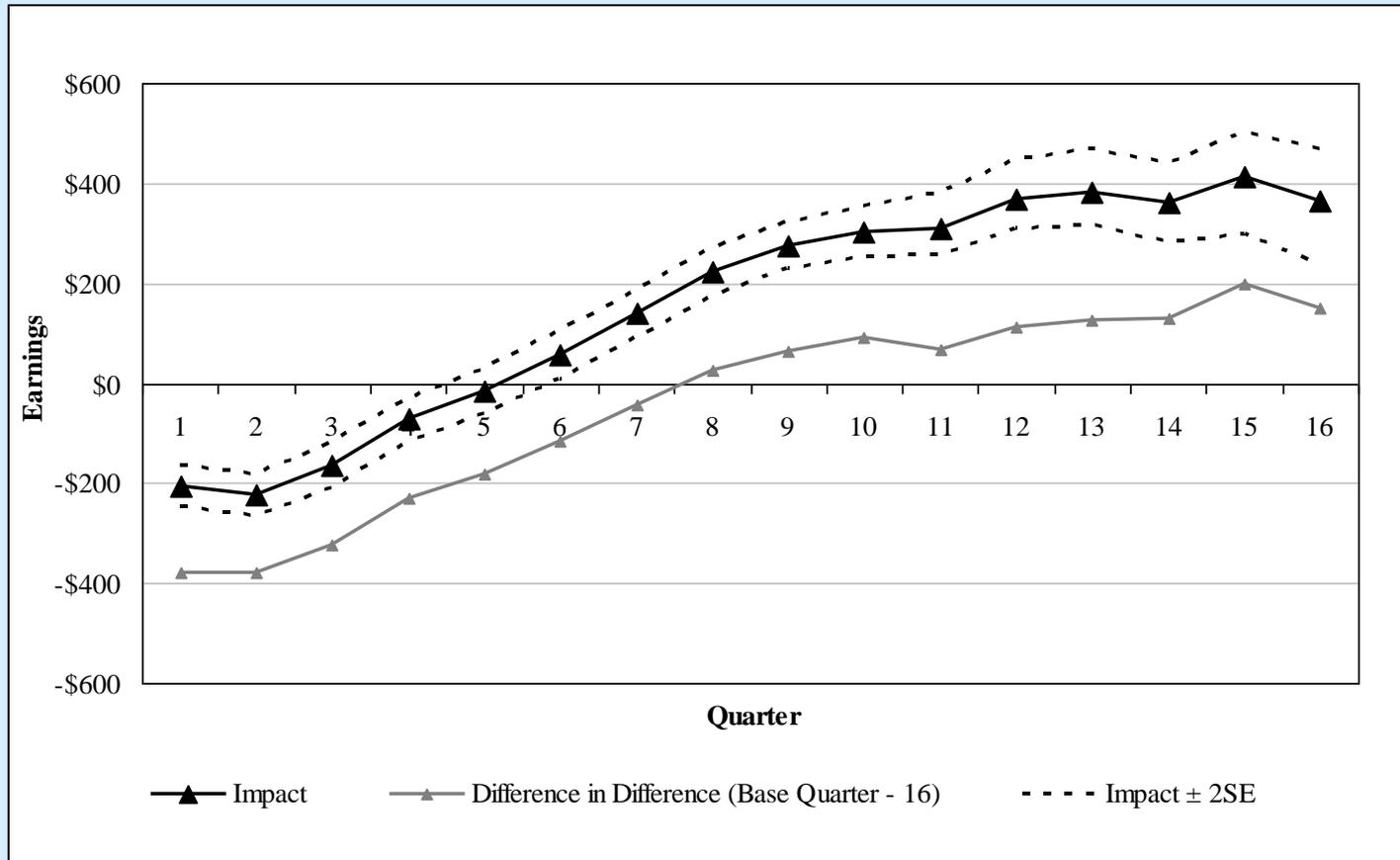
Heinrich et al., 2008; WIA nonexperimental impact evaluation

Quarterly Earnings Impact for Males, WIA Training versus Comparison Group



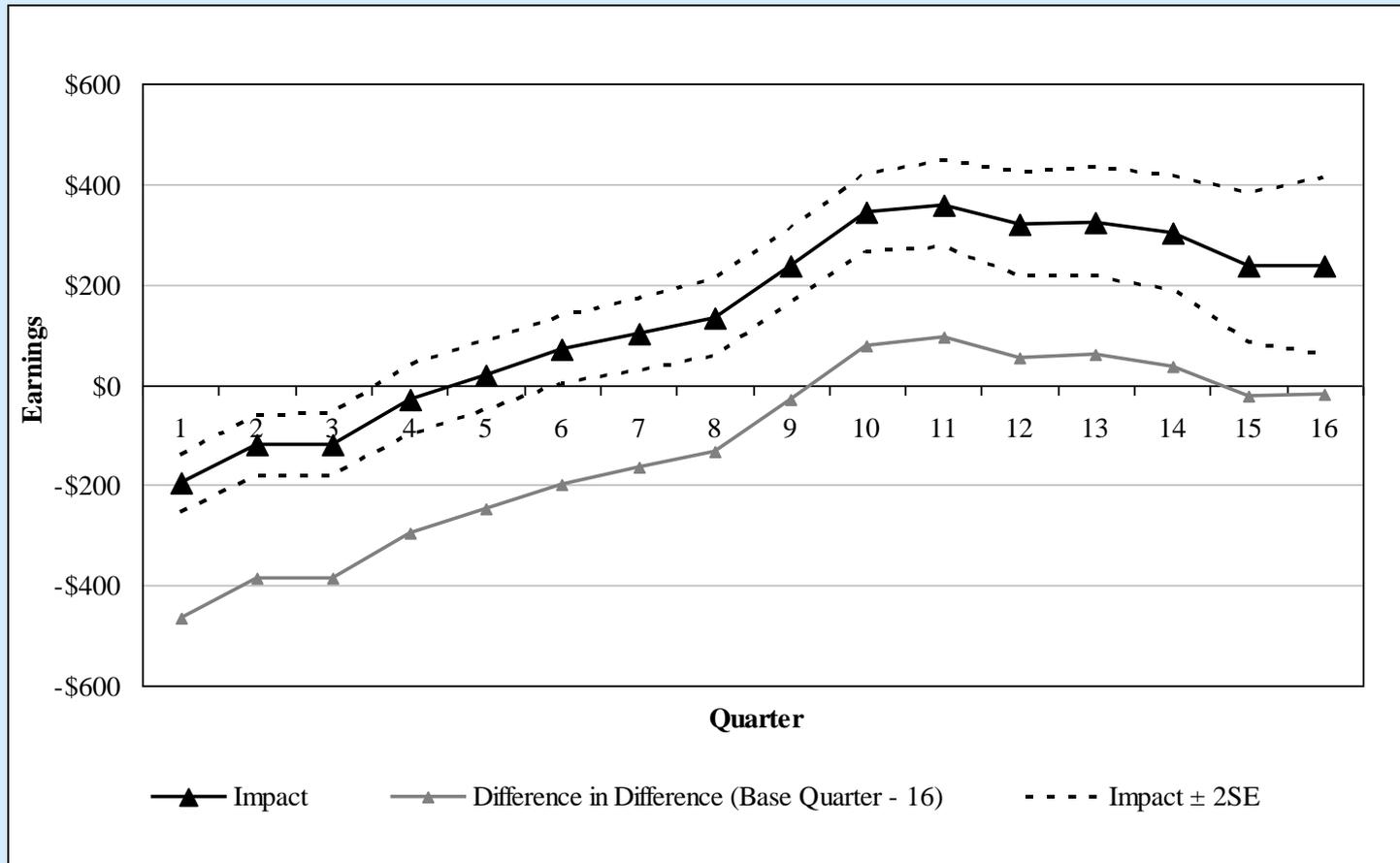
Heinrich et al., 2008; WIA nonexperimental impact evaluation

Quarterly Earnings Impact for Female Dislocated Workers, WIA vs. Comparison Group



Heinrich et al., 2008; WIA nonexperimental impact evaluation

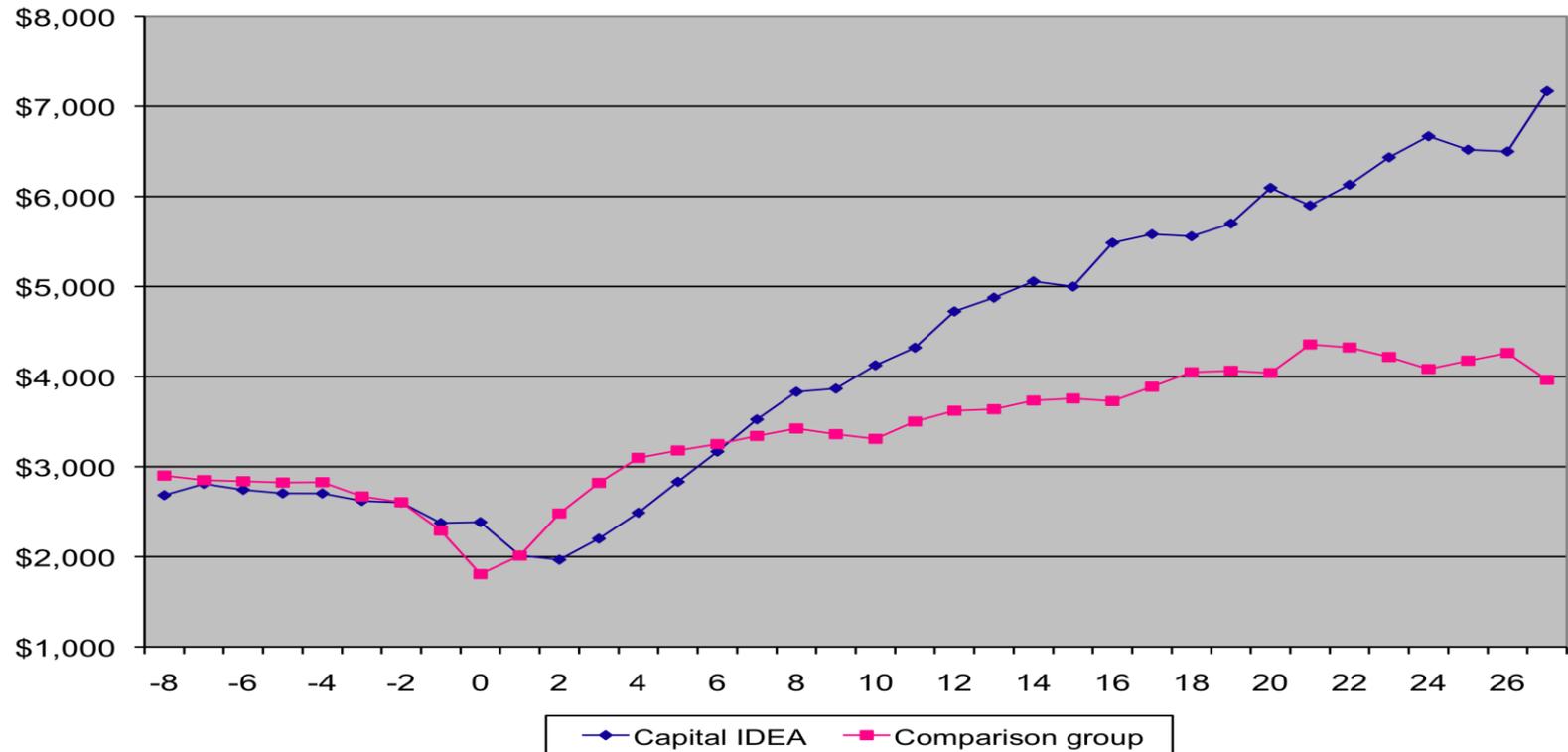
Quarterly Earnings Impact for Male Dislocated Workers, WIA vs. Comparison Group



Heinrich et al., 2008; WIA nonexperimental impact evaluation

Impacts from Sectoral Training Programs Are Large and Enduring

Average Quarterly Earnings for 2003-2004 Capital IDEA Participants and Comparison Group Members



Smith, King & Schroeder 2011

Counterfactual in workforce development program evaluations

Random assignment reduces plausibility of alternative explanations for observed effects but does not preclude other threats to internal validity

- Typical "counterfactual" used in workforce development evaluations has frequently been misunderstood to be a "pure control" or "no-services" group
 - Instead, control group has usually included at least some individuals receiving services available elsewhere in the community (National JTPA Study, NEWWS)

Intent to treat vs. treatment on treated designs

- Workforce development evaluations frequently focus on impacts of *assignment* to treatment, not *receipt* of services
 - Intent-to-treat design preferred: full implementation of treatment not required for internal validity
 - As shares of assignees receiving treatment are typically low in workforce development programs, impact estimates are substantially diluted by large numbers of untreated in treatment group
- Quasi-experiments more likely to estimate impact of treatment on treated, avoid low take-up problem
 - Recent experimental and nonexperimental studies have produced similar results about program effectiveness
 - Greenberg et al., 2006; Card et al., 2009

Weight of evidence suggests workforce development does work

- Wide range of public and private strategies produce returns on a par with those for many financial investments
 - Estimated returns of approx. 10-26% vs. 6-10% estimated real, long-term rate of return on stocks
- Workforce investments produce widespread benefits for employers and society as a whole
 - Returns are particularly remarkable given modest magnitude and low intensity of workforce investments relative to the size and complexity of barriers they address

Implications for 2012 and beyond

- Little movement on WIA reauthorization and only modest Congressional support for a high-skills agenda involving USDOL programs; far more support for and movement in higher education
- ARRA emphasis on and funding for longer-term training and skills development was fleeting
 - State and local workforce programs did not make major program changes or provide substantially more skills training
- On long road to economic recovery, both job creation and skill development are needed as complementary strategies

For further consideration

- ❑ Should we bring back public service employment in the workforce development tool kit? Funding for PSE eliminated in 1981 and not allowed since 1982
- ❑ Should we encourage states and localities to provide more sectoral skills training (e.g., SECTORS Act)?
- ❑ Can we do more to incentivize employers to provide career pathways and skills upgrading for existing workers, especially those in lower-skill, lower-wage jobs?
- ❑ How do we provide the resources needed for greater investments in skills development in light of continuing federal, state and local budget constraints?

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