

Active Labor Market Policy Evaluations: A Meta-analysis

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Introduction

- job training and other Active Labor Market Programs (ALMP's) have been promoted as a remedy for structural and cyclical unemployment
- early U.S. experience: MDTA (1960's); CETA (1970's); JPTA (1980's-90's)
- European experience: Scandinavia 1970's forward. Germany 1990's forward. Denmark, UK, etc
- Latin America: National Training Institutes

- from the beginning, the effectiveness of training programs has been controversial
- mid-1970's: earliest “serious” evaluations in the U.S. (Ashenfelter, 1976, 1978)
- identified the “selection problem” in evaluating ALMP’s: participant selection driven by combination of self-selection, program rules, and incentives of program operators
- how would trainees perform in the absence of training?

Chronology

a. The Need for Experimental Evidence

- Ashenfelter 1978; Ashenfelter-Card 1985: nonexperimental longitudinal estimators
- Lalonde 1985: evaluation of methods

b. Defense of Non-Experimental Methods

- Heckman-Hotz - specification tests
- Dehejia-Wahba - matching
- Heckman et al - matching with limitations

Where are we now?

- widespread adoption of matching strategies; most frequently used alternative method: duration models
- some randomized evaluations: Job Corps (US), very few in Europe (NL, UK)
- (our view): training and other ALMP's can work, but precise circumstances under which they are most effective are unclear:
 - types of programs?
 - types of participants?
- methodological concerns?

Meta-Analysis of Current Literature

- a) try to discern patterns of relative effectiveness by type of program, target population, etc.
- b) try to compare/contrast results based on different methodologies, data sources

Today's presentation:

- a) summary of types of programs and types of evaluations: a new sample of ALM program estimates
- b) meta-analysis of effectiveness

A new sample of ALM program estimates

- We contacted all members of IZA program area “Evaluation of labor market programs” and NBER “Labor Studies” program

Table 1: Overview of Survey Responses

	Number Contacted (1)	Number Responses (2)	Response Rate (3)	Number with 1+ Research Papers (4)	Percent of Contacts with Papers (5)
1. IZA Fellows	231	152	65.8	66	28.6
2. NBER Labor Studies Associates	130	33	25.4	6	4.6
3. Secondary Contacts	14	12	85.7	12	85.7
4. Total	375	197	52.5	84	22.4

- Collecting recent (post-1995) microeconomic studies
- Group of 84 researchers returned total of 156 separate studies

Previous / other surveys or samples for Meta-analyses:

- Heckman, LaLonde, Smith (1999): US, Europe
- Martin and Grubb (2001): OECD
- Kluve (2006): Europe
- Worldbank Youth Employment Inventory

“in scope”:

- classroom or on-the-job training
- job search assistance or sanctions for failing to search
- subsidized private sector employment
- subsidized public sector employment

(or combination)

Other restrictions:

- private / public employment subsidies at individual-level:
exclude firm-level subsidy programs
- time-limited programs: exclude open-ended entitlements
like general-education subsidies, childcare programs
- explicit “active” component: exclude purely financial
programs (manipulation UI, welfare benefits)

Other restrictions - Methodology:

- well-documented empirical evaluation studies based on individual microdata
- with explicit comparison or control group

Analysis sample:

156

- 33 (program requirements)
 - 18 (methodological criteria)
 - 8 (other)
- = 97 studies

Extraction of Program Estimates and other information

- 38% of authors attempted to complete questionnaire
- ultimately, we extracted information ourselves
- many variables straightforward: program type, age +gender of participant population, type of dep var, methodology
- less so: degree of “overlap” of characteristics between treatment and comparison groups
- very few studies with info on program costs: average program duration

Most difficult task: standardized measure of program impact

3 qualitative categories: significantly positive, insignificantly different from zero, significantly negative

+ Short-term impacts (first 12 months), medium-term impacts (12-24 months), long-term impacts (>24 months)

199 “program estimates” for a specific program and participant group

108 with short-term and medium-term impact

48 with short-term and long-term impact

Table 2: Distribution of Program Estimates By Latest Date and Country

	Number of Estimates (1)	Percent of Sample (2)
<i>a. By Latest Date</i>		
1996	2	1.0
1997	2	1.0
1998	4	2.0
1999	12	6.0
2000	10	5.0
2001	3	1.5
2002	19	9.5
2003	14	7.0
2004	26	13.1
2005	16	8.0
2006	41	20.6
2007	48	24.1
2008	2	1.0

b. By Country

Australia	2	1.0
Austria	13	6.5
Belgium	6	3.0
Canada	1	0.5
Czech Republic	1	0.5
Denmark	25	12.6
Dominican Republic	1	0.5
Estonia	1	0.5
Finland	2	1.0
France	14	7.0
Germany	45	22.6
Hungary	1	0.5
Israel	2	1.0
Netherlands	4	2.0
New Zealand	3	1.5
Norway	7	3.5
Peru	2	1.0
Poland	5	2.5
Portugal	2	1.0
Romania	4	2.0
Slovakia	13	6.5
Spain	3	1.5
Sweden	19	9.5
Switzerland	9	4.5
United Kingdom	4	2.0
United States	10	5.0

Table 3: Characteristics of Sample of Estimated Program Effects

	Overall Sample (1)	Austria Germany & Switzerland (2)	Scandinavia (3)	Anglo Country (4)
1. Number of Estimates	199	67	53	20
2. Program Intake				
a. Drawn from Registered Unemployed (%)	68.3	94.0	67.9	15.0
b. Long Term Unemployed (%) (registered and other)	12.6	0.0	3.8	25.0
c. Other (Disadvantaged, etc.) (%)	19.1	6.0	28.3	60.0
3. Type of Program				
a. Classroom or Work Experience Training (%)	41.7	62.7	26.5	35.0
b. Job Search Assistance (%)	12.1	7.5	5.7	30.0
c. Subsidized Private Sector Employment (%)	14.6	3.0	20.8	10.0
d. Subsidized Public Sector Employment (%)	14.1	16.4	9.4	5.0
e. Threat of Assignment to Program (%)	2.5	0.0	7.5	0.0
f. Combination of Types (%)	15.1	10.4	30.2	20.0

4. Program Duration				
a. Unknown or Mixed (%)	26.1	11.9	32.1	45.0
b. 4 Months or Less (%)	20.6	26.9	20.8	25.0
c. 5-9 Months (%)	35.2	28.4	43.4	30.0
d. Over 9 Months (%)	18.1	32.8	3.8	0.0
5. Gender of Program Group ^{a/}				
a. Mixed (%)	59.3	55.2	73.6	40.0
b. Male Only (%)	20.6	22.1	13.2	25.0
c. Female Only (%)	16.6	21.0	13.2	35.0
6. Age of Program Group ^{b/}				
a. Mixed (%)	63.8	62.7	56.6	60.0
b. Age Under 25 Only (%)	14.1	0.0	18.9	25.0
c. Age 25 and Older Only (%)	21.6	35.8	24.5	15.0

Notes: Sample includes estimates drawn from 97 separate studies. Scandinavia includes Denmark, Finland, Norway and Sweden. Anglo countries include Australia, Canada, New Zealand, UK, and US.

Table 4: Evaluation Methods Used in Sample of Estimated Program Effects

	Overall Sample (1)	Austria Germany & Switzerland (2)	Scandinavia (3)	Anglo Countries (4)
1. Number of Estimates	199	67	53	20
2. Basic Methodology				
a. Cross Sectional with Comparison Group (%)	3.0	0.0	5.7	0.0
a. Longitudinal with Comparison Group (%)	51.3	80.6	30.2	75.0
c. Duration Model with Comparison Group (%)	36.2	19.4	43.4	0.0
d. Experimental Design (%)	9.1	0.0	18.9	25.0
3. Dependent Variable				
a. Probability of Employment at Future Date (%)	45.7	71.6	17.0	40.0
b. Wage at Future Date (%)	11.6	4.5	20.8	25.0
c. Duration of Time in Registered Unempl. until Exit to Job (%)	24.6	16.4	35.8	10.0
d. Duration of Time in Registered Unempl. (any type of exit) (%)	6.0	1.5	22.6	0.0
e. Other Duration Measures (%)	3.5	0.0	0.0	0.0
f. Probability of Registered Unempl. at Future Date (%)	6.0	6.0	3.8	25.0
4. Covariate Adjustment Method				
a. Matching (%)	50.8	73.1	30.2	45.0
b. Regression (%)	42.7	26.9	52.8	40.0

Table 5: Summary of Estimated Impacts of ALM Programs

	Percent of Estimates that are:		
	Significantly Positive (1)	Insignificant (2)	Significantly Negative (3)
I. Short Term Impact Estimates (~12 Months)			
a. Overall Sample (N=183)	39.3	32.8	27.9
b. Austria, Germany & Switzerland (N=59)	28.8	33.9	37.3
c. Scandinavia (N=50)	46.0	30.0	24.0
d. Anglo Countries (N=17)	70.6	11.8	17.7
II. Medium Term Impact Estimates (~24 Months)			
a. Overall Sample (N=108)	50.0	39.8	10.2
b. Austria, Germany & Switzerland (N=45)	53.3	35.6	11.1
c. Scandinavia (24)	37.5	50.0	12.5
d. Anglo Countries (N=15)	73.3	26.7	0.0
III. Long Term Impact Estimates (36+ Months)			
a. Overall Sample (N=50)	54.0	40.0	6.0
b. Austria, Germany & Switzerland (N=23)	60.9	39.1	0.0
c. Scandinavia (N=15)	40.0	46.7	13.3
d. Anglo Countries (N=10)	50.0	40.0	10.0

Table 6a: Relation Between Short-Term and Medium-Term Impacts of ALM Programs

	Percent of Medium-Term Estimates that are:		
	Significantly Positive (1)	Insignificant (2)	Significantly Negative (3)
Short Term Impact Estimate:			
a. Significantly Positive (N=30)	90.0	10.0	0.0
b. Insignificant (N=28)	28.6	71.4	0.0
c. Significantly Negative (N=36)	30.6	41.7	27.8

Table 6b: Relation Between Short-Term and Long-Term Impacts of ALM Programs

	Percent of Long-Term Estimates that are:		
	Significantly Positive (1)	Insignificant (2)	Significantly Negative (3)
<u>Short Term Impact Estimate:</u>			
a. Significantly Positive (N=19)	73.7	21.1	5.3
b. Insignificant (N=13)	30.8	69.2	0.0
c. Significantly Negative (N=16)	43.8	43.8	12.5

Figure 1a: Distribution of Short-term Program Effects Over Time

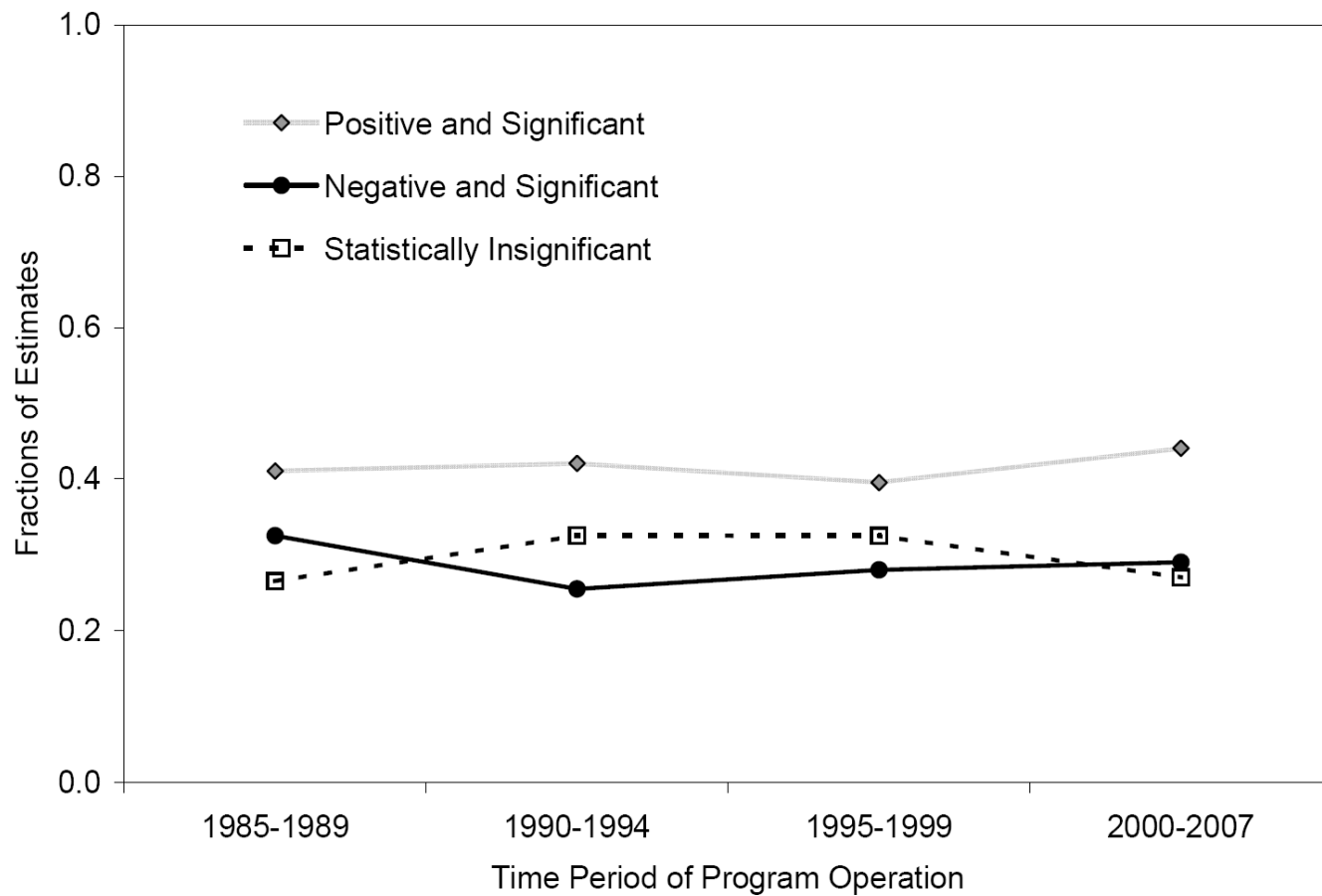


Figure 1b: Distribution of Medium-term Program Effects Over Time

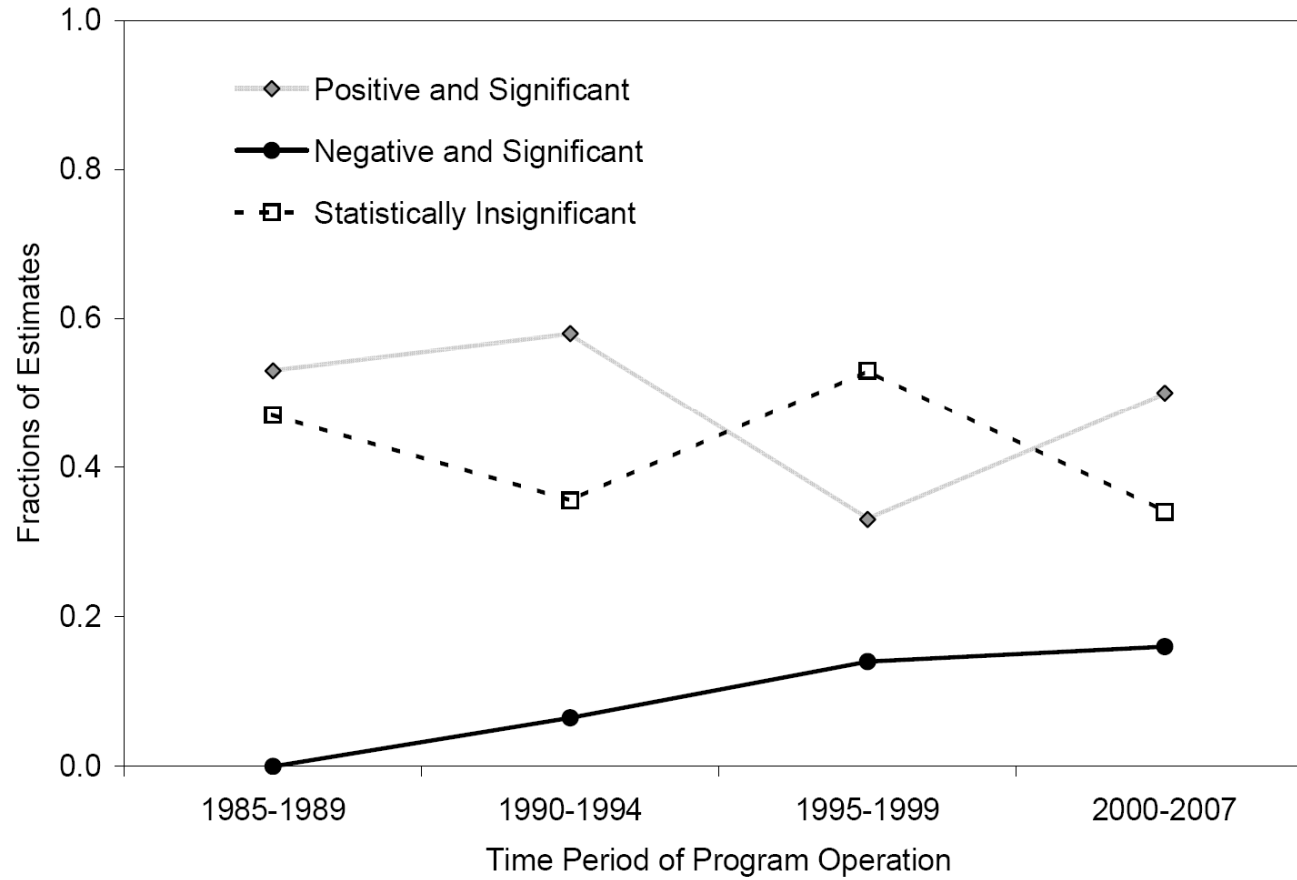


Table 7: Ordered Probit Models for Sign/Significance of Estimated Short-term Program Impacts

	Dependent variable = ordinal indicator for sign/significance of estimated impact					
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Dummies for Dependent Variable (omitted=Post-program employment)</u>						
1. Time in Reg. Unemp. Until Exit to Job	0.59 (0.21)	--	--	--	0.45 (0.23)	0.29 (0.26)
2. Time in Registered Unemp.	1.05 (0.33)	--	--	--	1.00 (0.38)	0.99 (0.44)
3. Other Duration Measure	0.38 (0.42)	--	--	--	0.34 (0.44)	0.03 (0.49)
4. Prob. Of Registered Unemp.	1.43 (0.49)	--	--	--	1.37 (0.50)	1.11 (0.53)
5. Post-program Earnings	0.29 (0.30)	--	--	--	0.21 (0.32)	0.03 (0.37)
<u>Dummies for Type of Program (omitted=Mixed and Other)</u>						
6. Classroom or On-the-Job Training	--	-0.40 (0.26)	--	--	-0.04 (0.31)	0.03 (0.36)
7. Job Search Assistance	--	0.38 (0.33)	--	--	0.54 (0.37)	0.65 (0.44)
8. Subsidized Private Sector Job	--	-0.43 (0.31)	--	--	-0.11 (0.34)	-0.12 (0.38)
9. Subsidized Public Sector Job	--	-0.71 (0.32)	--	--	-0.50 (0.37)	-0.46 (0.42)

Dummies for Age and Gender of Participants (omitted=Pooled Age, Pooled Gender)

10. Age Under 25 Only	--	--	-0.74 (0.25)	--	-0.75 (0.27)	-0.71 (0.30)
11. Age 25 and Older Only	--	--	-0.44 (0.22)	--	-0.40 (0.24)	-0.28 (0.28)
12. Men Only	--	--	-0.11 (0.23)	--	-0.06 (0.24)	-0.16 (0.27)
13. Women Only	--	--	-0.03 (0.22)	--	-0.04 (0.24)	-0.17 (0.27)

Dummies for Program Duration (omitted=5-9 month duration)

14. Unknown or Mixed	--	--	--	0.46 (0.22)	0.09 (0.26)	0.08 (0.28)
15. Short (≤ 4 Months)	--	--	--	0.40 (0.22)	0.02 (0.26)	0.11 (0.28)
16. Long (> 9 Months)	--	--	--	-0.25 (0.25)	-0.45 (0.28)	-0.44 (0.32)
17. Dummies for Intake Group and Timing of Program	No	No	No	No	No	Yes
18. Dummies for Country Group	No	No	No	No	No	Yes
19. Dummy for Experimental Design	--	--	--	--	--	0.06 (0.39)
20. Square Root of Sample Size (Coefficient $\times 1000$)	--	--	--	--	--	-0.17 (0.27)

Table 8: Ordered Probit Models for Sign/Significance of Estimated Medium-term Program Impacts

	Dependent variable = ordinal indicator for sign/significance of estimated impact					
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Dummies for Dependent Variable (omitted=Post-program employment)</u>						
1. Time in Reg. Unemp. Until Exit to Job	0.55 (0.26)	--	--	--	1.21 (0.69)	0.90 (0.73)
2. Other Duration Measure	0.28 (0.84)	--	--	--	0.38 (0.99)	0.45 (0.99)
3. Prob. Of Registered Unemp.	0.63 (0.74)	--	--	--	0.33 (0.77)	0.38 (0.79)
4. Post-program Earnings	0.22 (0.31)	--	--	--	0.04 (0.38)	0.09 (0.38)
<u>Dummies for Type of Program (omitted=Mixed and Other)</u>						
6. Classroom or On-the-Job Training	--	0.56 (0.40)	--	--	0.86 (0.51)	0.95 (0.51)
7. Job Search Assistance	--	0.66 (0.58)	--	--	0.48 (0.69)	0.53 (0.78)
8. Subsidized Private Sector Job	--	0.24 (0.53)	--	--	0.25 (0.61)	0.32 (0.62)
9. Subsidized Public Sector Job	--	-0.58 (0.47)	--	--	-0.82 (0.60)	-0.80 (0.60)

Dummies for Age and Gender of Participants (omitted=Pooled Age, Pooled Gender)

10. Age Under 25 Only	--	--	-0.83 (0.36)	--	-0.89 (0.41)	-0.87 (0.41)
11. Age 25 and Older Only	--	--	-0.39 (0.30)	--	-1.12 (0.41)	-1.21 (0.42)
12. Men Only	--	--	-0.40 (0.34)	--	-0.04 (0.40)	-0.17 (0.42)
13. Women Only	--	--	0.28 (0.32)	--	0.51 (0.37)	0.41 (0.39)

Dummies for Program Duration (omitted=5-9 month duration)

14. Unknown or Mixed	--	--	--	-0.72 (0.33)	-1.10 (0.41)	-1.05 (0.42)
15. Short (≤ 4 Months)	--	--	--	0.26 (0.34)	-0.43 (0.41)	-0.53 (0.43)
16. Long (> 9 Months)	--	--	--	-0.06 (0.33)	-0.32 (0.39)	-0.28 (0.39)
17. Dummy for Experimental Design	--	--	--	--	--	0.15 (0.83)
18. Square Root of Sample Size (Coefficient $\times 1000$)	--	--	--	--	--	1.13 (0.87)

Summary / Conclusion

- Generally, longer-term evaluations more favorable than short-term evaluations: in particular, classroom and on-the-job training
- Data source matters: evaluations based on time in registered unemployment show more positive short-term results than those based on employment / earnings
- Public sector jobs programs and programs for youth generally less successful than other ALMP types
- Current ALMP programs show no differential effects for men and women
- Controlling for program type and participant composition, we find no significant differences in distribution of pos / neg / insign program estimates from experimental and non-experimental evaluations