

# What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations

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# Current Labor Market Challenges

- Continuing high unemployment after the Great Recession
- Long term unemployment
- Youth unemployment
- Earnings losses after job displacement

ALMP's have been proposed and used in many countries to address these problems

# Key Questions

- Which types of programs work better?
  - ▶ Job search assistance, counseling
  - ▶ Training
  - ▶ Subsidized employment
- Short run versus long run effects?
- Gain from matching program types with participants?
- Do effects vary over the business cycle?

Meta analysis provides a way to summarize the literature and gain systematic insights

## Previous Reviews

- Narrative reviews: Martin (2000), Martin and Grubb (2001), OECD Employment Outlook (2015, chapter 3)
- Quantitative reviews: Greenberg et al. (2003), Bloom et al. (2003), Heckman et al. (1999), Kluve and Schmidt (2002), Kluve (2010), Card Kluve Weber (2010)
- CKW – surveyed members of IZA and NBER in 2007; asked respondents for papers and referrals; final sample of 97 studies

# This Paper

- Extend CKW (2010): searching for studies written since 2007
- Profiles of IZA research fellows interested in *program evaluation*
- NBER working papers
- Google scholar search of papers citing CKW(2010) or Kluve (2010)
- Specialized online project lists
- Backward/ forward citation search
- Studies coded by C, K, and W using standardized coding protocol
- Assemble sample of 207 studies providing 857 separate estimates

Figure 1: Number of Program Estimates, By Year of Program Start

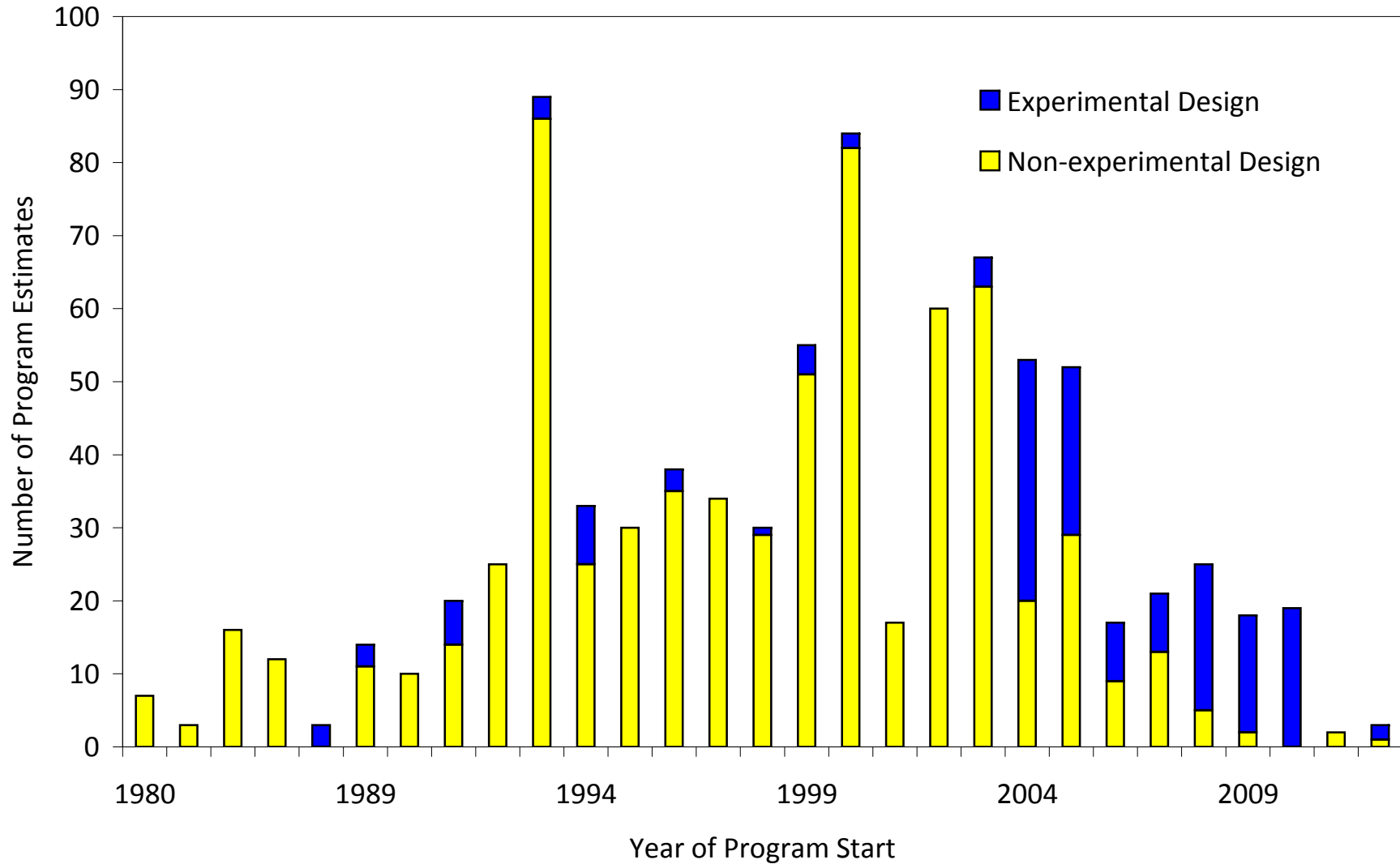
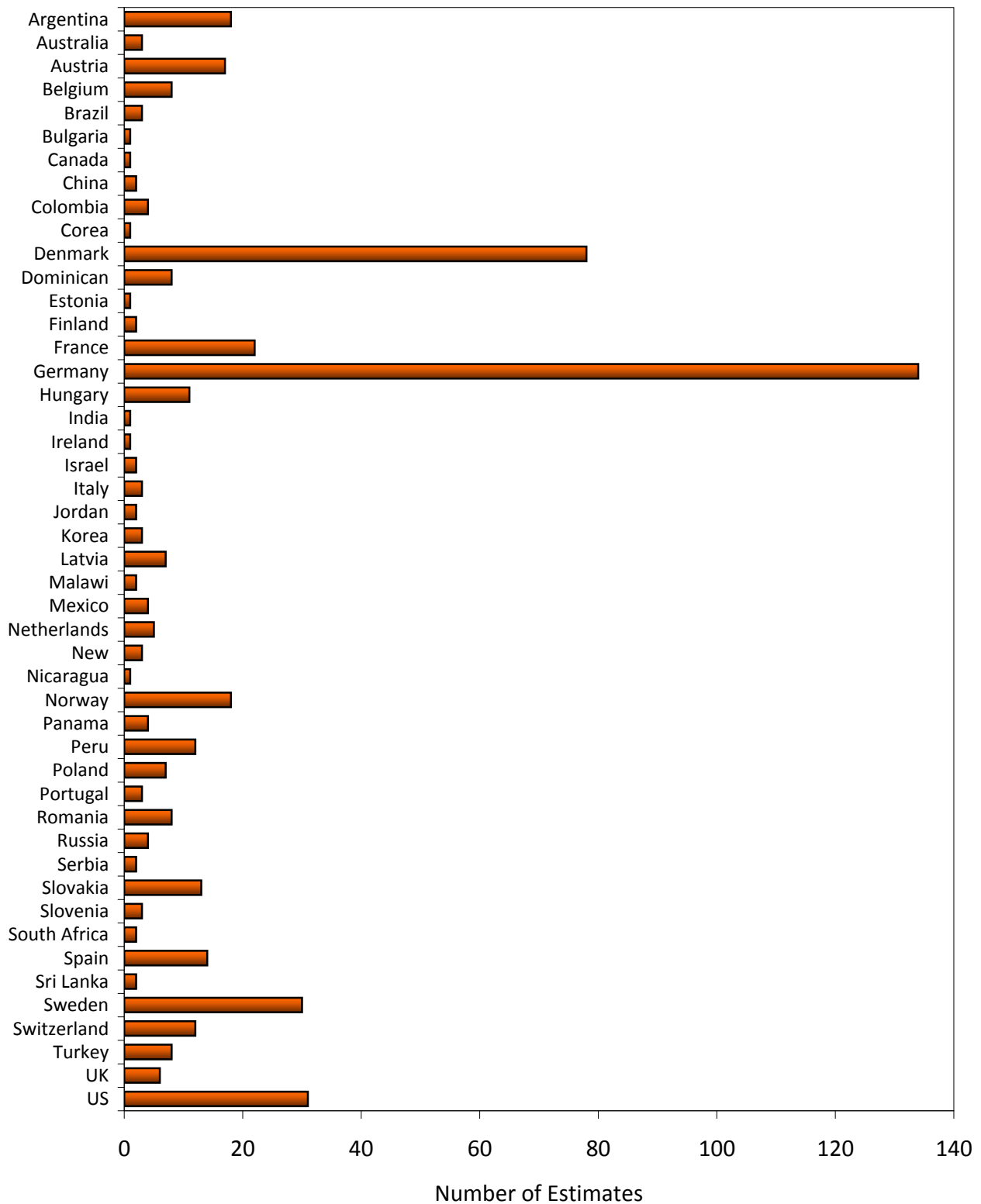


Figure 2: Number of Program Estimates, By Country



# Variable Extraction

- Program type
- Program participant characteristics
- Program duration
- Type of outcome variable, econometric methodology
- Program/participant subgroups: 526
- Post program time horizon:
  - ▶ short run: < 1 year after completion, 415 estimates
  - ▶ medium run: 1 – 2 years after completion, 301 estimates
  - ▶ long run: > 2 years after completion, 141 estimates
- Impact estimates: 857
- Labor market conditions at time of program operation: GDP growth, unemployment rate



# Two Measures of Program Impact

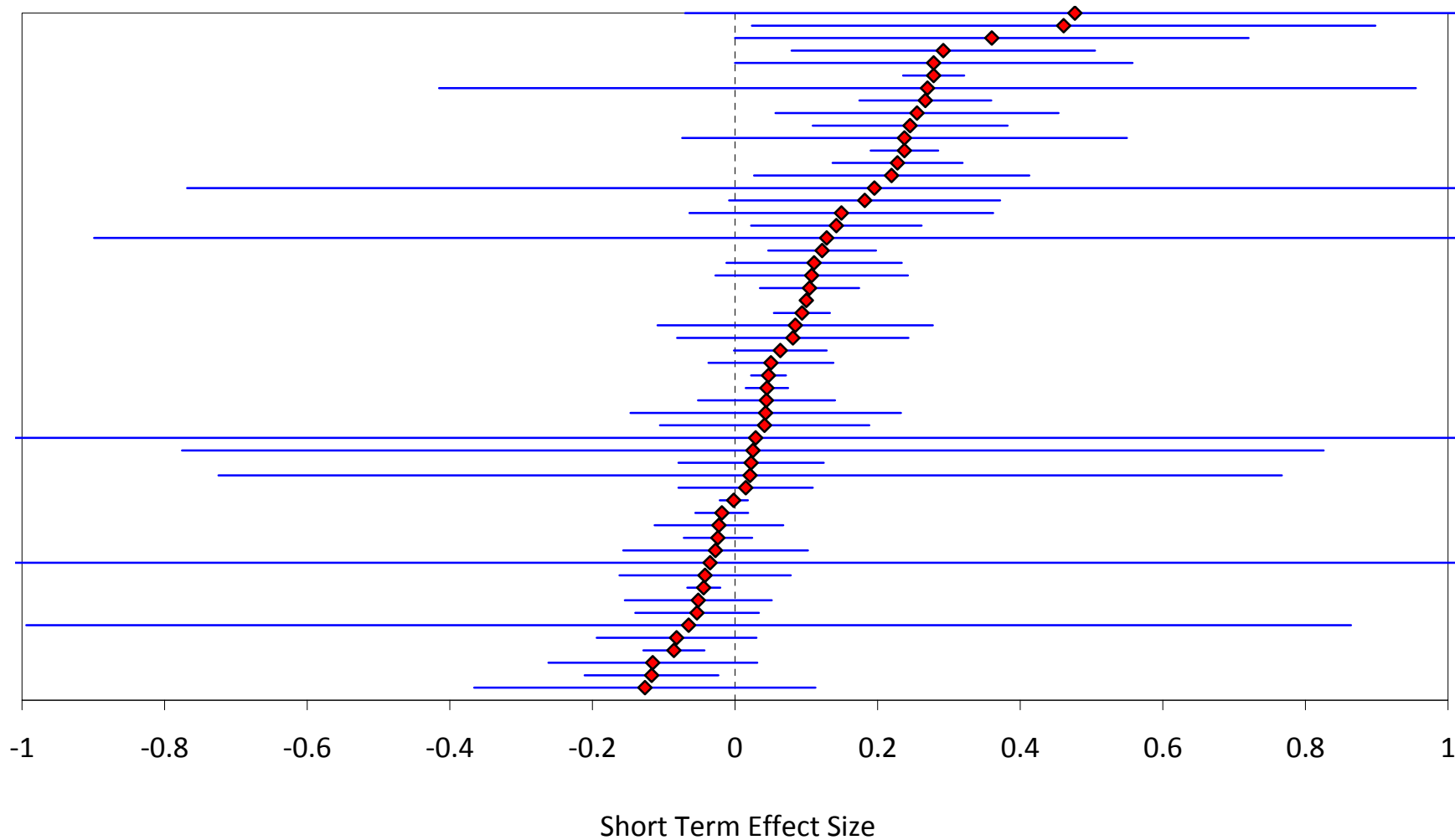
- 1 Sign and significance of program effect: for all estimates
  - ▶ significantly positive
  - ▶ insignificant
  - ▶ significantly negative
- 2 Effect size: estimates evaluating effect on *probability of employment*  
57% of total sample

$$Effectsize = \frac{\text{effect on employment rate of treated}}{\text{sd employment rate of controls}}$$

# Program Impacts

	Full Sample	Sample with Effect Size	
	Percent	Percent	Mean (SD)
<u>Short Term Estimates</u>			
Significant positive	40	33	22.0 (3.3)
Insignificant	42	44	0.5 (1.2)
Significant negative	18	23	-14.4 (2.4)
<u>Medium Term Estimates</u>			
Significant positive	52	47	25.0 (4.3)
Insignificant	40	43	2.5 (0.8)
Significant negative	8	10	-10.9 (2.3)
<u>Long Term Estimates</u>			
Significant positive	61	65	27.9 (6.2)
Insignificant	35	32	3.7 (1.5)
Significant negative	4	3	-9.7 (0.1)

Figure 2a: Short Term Effect Sizes and Confidence Intervals



Note: 3 large positive estimated effect sizes not shown.

Figure 2b: Medium Term Effect Sizes and Confidence Intervals

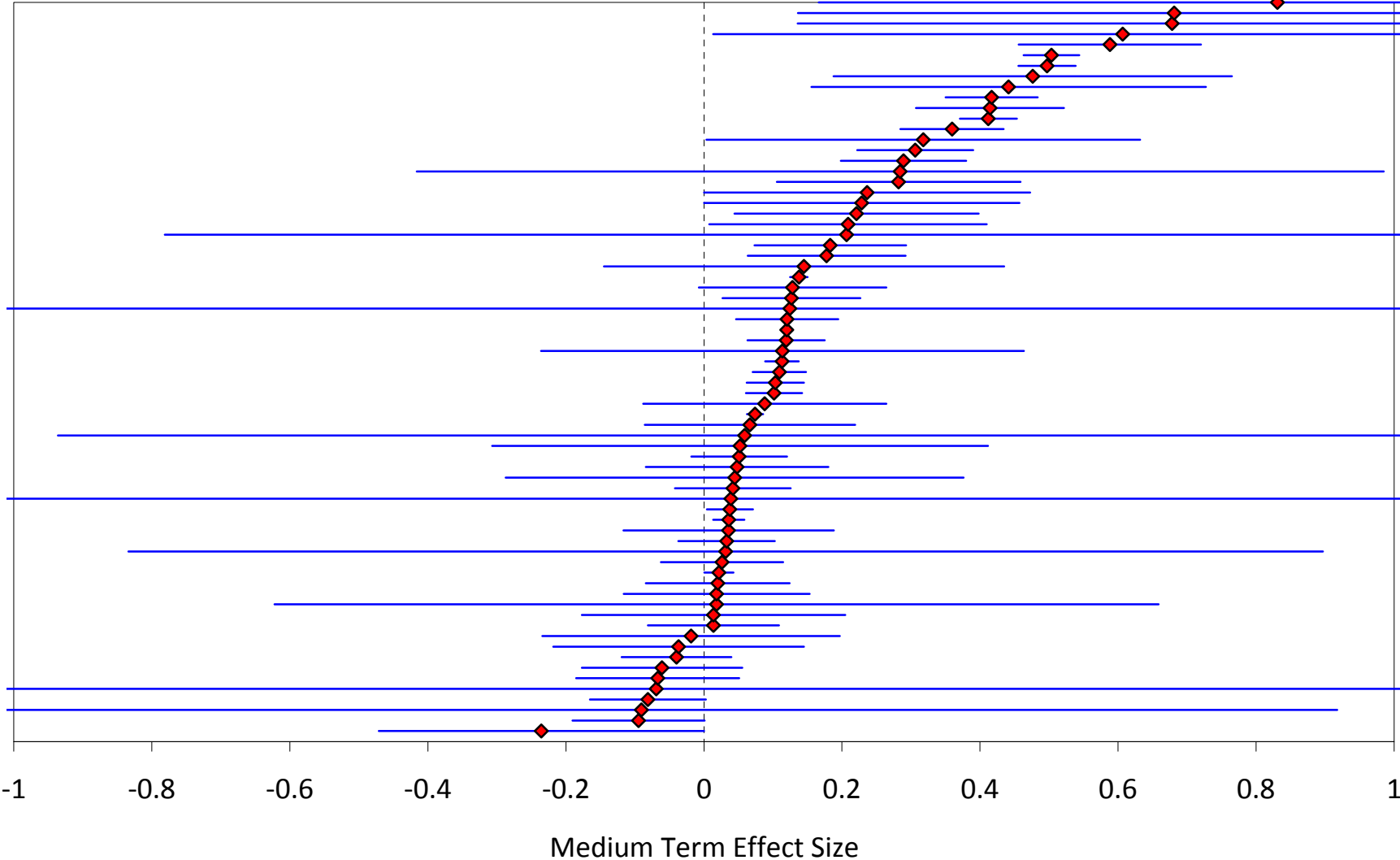
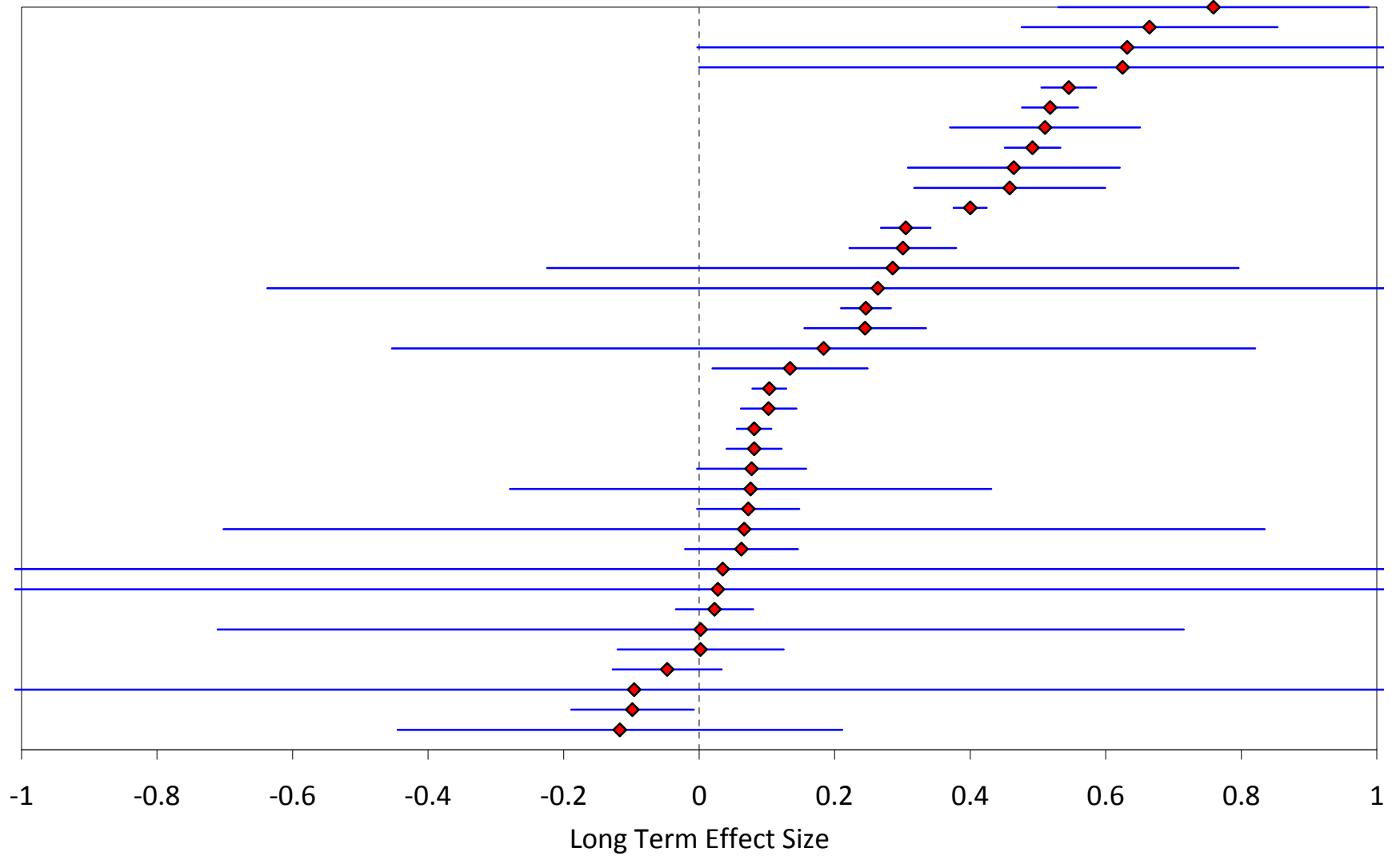


Figure 2c: Long Term Effect Sizes and Confidence Intervals



## Change in Effect Size

	ST to MT	ST to LT	MT to LT
All	0.043 (0.020)	0.037 (0.035)	-0.012 (0.007)
N	105	43	47
<u>By Program Type</u>			
Training	0.070 (0.018)	0.087 (0.035)	-0.010 (0.011)
Job Search Assist.	0.009 (0.019)	-0.005 (0.003)	-0.004 (0.006)
Private Subsidy	-0.055 (0.126)	-0.006 (0.156)	-0.005 (0.031)
Public Sector Emp.	-0.007 (0.070)	-0.299 (0.299)	-0.039 (0.039)
Other	0.013 (0.035)	-0.048 (0.021)	-0.029 (0.012)

# Meta Analytic Models of Program Impacts

$y$  outcome variable,  $N$  sample size

$b$  estimate of program effect  $\beta$ ,  $v = K^2\sigma^2/N$  variance of  $b$

Effect size

$$b = \beta + \sigma \frac{1}{\sqrt{N}} Kz$$
$$b/\sigma = \beta/\sigma + \frac{1}{\sqrt{N}} Kz$$

Estimated model

$$\beta/\sigma = X\alpha + \varepsilon$$
$$b/\sigma = X\alpha + u \quad \text{OLS}$$
$$t = b/v = X\tilde{\alpha} + \tilde{u} \quad \text{Ordered Probit}$$

# Models

	Effect Size	Sign/Significance
Medium Term	0.056 (0.021)	0.483 (0.099)
Long Term	0.091 (0.038)	0.742 (0.167)
<u>Program Type (Training)</u>		
Job search Assist.	-0.012 (0.043)	0.286 (0.168)
Private Subsidy	0.086 (0.057)	0.076 (0.210)
Public Sector Emp.	-0.152 (0.044)	-0.758 (0.228)
Other	0.007 (0.094)	-0.205 (0.184)
<u>Outcome of Interest (Probability of Employment)</u>		
Earnings		-0.003 (0.130)
Hazard to New Job		0.275 (0.211)
Other Hazard		0.613 (0.275)
Unemployment Status		0.598 (0.293)



## Models continued

	Effect Size	Sign/Significance
<u>Age ( Mixed)</u>		
Youths (< 25)	-0.062 (0.045)	-0.368 (0.151)
Older (>= 25)	-0.151 (0.044)	-0.423 (0.157)
<u>Gender (Mixed)</u>		
Males only	0.029 (0.049)	-0.007 (0.149)
Females only	0.107 (0.052)	0.064 (0.144)
<u>Type of Participant (Unemployed)</u>		
Disadvantaged	0.06 (0.089)	0.542 (0.228)
Long-term Unemployed	0.217 (0.076)	0.388 (0.181)

## Models continued

	Effect Size	Sign/Significance
Program Duration Longer than 9 Months	-0.056 (0.042)	-0.135 (0.179)
Experiment	-0.031 (0.049)	-0.065 (0.170)
Square Root of Samplesize	-0.039 (0.086)	0.159 (0.184)
Published Article	-0.056 (0.043)	-0.203 (0.133)
Citations Rank Index	-0.003 (0.004)	0.007 (0.012)

# Effect Size Models

	All Countries	Den, Fr, Ger, US	
Medium Term	0.057 (0.022)	0.078 (0.020)	0.090 (0.025)
Long Term	0.084 (0.040)	0.073 (0.040)	0.109 (0.054)
GDP Growth Rate (%)	-0.022 (0.013)	-0.070 (0.019)	
Unemp. Rate			0.078 (0.024)
Country Dummies	Yes	Yes	Yes

# Conclusions

## Policy Conclusions

- Time profile of impacts for “work first” programs different from “human capital” programs
- Females and long term unemployed benefit more from participating, youths and older workers benefit less
- Potential gains from matching participants and program types
- ALMPs have larger impacts in periods of slow growth and high unemployment

## Methodological Conclusions

- Impact measures: effect sizes confirm sign/signif results
- Estimates based on RCTs do not differ from quasi-experimental ones
- No indication of publication bias
- Choice of outcome variable matters