

2010

# A Proposal for Early Impact, Persistent, and Cost-Effective Job Creation Policies

Timothy J. Bartik

*W.E. Upjohn Institute*, [bartik@upjohn.org](mailto:bartik@upjohn.org)

---

## Citation

Bartik, Timothy J. 2010. "A Proposal for Early Impact, Persistent, and Cost-Effective Job Creation Policies." *Employment Research* 17(1): 1-4. [https://doi.org/10.17848/1075-8445.17\(1\)-1](https://doi.org/10.17848/1075-8445.17(1)-1)

This title is brought to you by the Upjohn Institute. For more information, please contact [ir@upjohn.org](mailto:ir@upjohn.org).

# UPJOHN INSTITUTE

## Employment Research

JANUARY 2010

### In this issue . . .

*Timothy J. Bartik*

A Proposal for Early Impact,  
Persistent, and Cost-Effective  
Job Creation Policies



*John A. Turner*

Pension Policy: The Search  
for Better Solutions



### New Books

Vol. 17, No. 1

*Employment Research* is published quarterly by the W.E. Upjohn Institute for Employment Research. Issues appear in January, April, July, and October.

The Institute is a nonprofit, independent research organization devoted to finding and promoting solutions to employment-related problems at the international, national, state, and local levels. The Institute is an activity of the W.E. Upjohn Unemployment Trustee Corporation, which was established in 1932 to administer a fund set aside by Dr. W.E. Upjohn, founder of the Upjohn Company, to conduct research on the causes and effects of unemployment and seek measures for the alleviation of the hardships suffered by the unemployed.

W.E. Upjohn Institute  
for Employment Research  
300 S. Westnedge Avenue  
Kalamazoo, MI 49007-4686  
(269) 343-5541  
[www.upjohninstitute.org](http://www.upjohninstitute.org)

Randall W. Eberts  
President

*Timothy J. Bartik*

## A Proposal for Early Impact, Persistent, and Cost-Effective Job Creation Policies

**D**ue to the recession, the U.S. economy has lost over 10 million jobs. Job creation rarely receives the focus it deserves in fiscal stimulus proposals, either in the one that has already been enacted or in many of the proposals currently being considered.

Job creation deserves greater focus because joblessness has large long-run economic costs. Because conventional fiscal stimulus does not focus on job creation—job creation is only a byproduct of boosting gross domestic product (GDP)—this fiscal stimulus is relatively costly per job created. As a result, current and proposed fiscal stimulus cannot create enough jobs at politically acceptable costs to meet the current job needs in the United States. If we are to sufficiently address these needs without overly adding to the budget deficit, we need to make job creation a central goal of a new fiscal stimulus package. This package must have a low cost per job created, address near-term job needs, and have persistent effects over the next several years.

### Why Creating Jobs Is as Important as Generating GDP

Much of the debate over fiscal stimulus focuses on GDP multiplier effects. The number of jobs created receives less attention.

Job creation deserves special focus because of the enormous costs of joblessness in the long run. Joblessness erodes the unemployed's self-confidence and job skills, and damages their reputations with employers. Lengthy unemployment reduces a worker's employment rates and wage rates in the long run.<sup>1</sup> Therefore, combating the recession should place a great emphasis on creating jobs, not just on boosting GDP. The long-run productivity of many workers and the economy will be enhanced by antirecession policies that stress job creation, even if they do not have greater effects on GDP.

### The Need for Immediate and Persistent Job Creation Policies

If joblessness damages long-run economic prospects, then the current recession is a disaster with long-run consequences. Losing millions of jobs not only imposes current pain, it also damages long-run economic productivity.

Since the start of the recession in December 2007, the employment-to-population ratio has dropped from 62.7 percent to 58.2 percent (as of December 2009). To restore employment conditions to prerecession levels, the economy would need an additional 10.7 million jobs.

Even though GDP has begun to recover, the labor market will likely have

large employment deficits for the next several years. In the last two recessions, employment-to-population rates did not increase from their trough level by more than 0.2 percent for more than two and a half years after the recovery in GDP had begun. If our current recovery in GDP began in mid-2009, history suggests that the employment-to-population ratio will not rise significantly above its current level until the beginning of 2012. One study finds that the U.S. economy will be short of 2007 employment rates by 10.7 million jobs in 2010, 8.5 million jobs in 2011, and 5.1 million jobs in 2012 (Schmitt and Baker 2009). Other analysts project that it will be seven years before unemployment rates dip below 5 percent (Baily 2009; Thoma 2009).

These employment deficits are occurring despite the \$787 billion fiscal stimulus package passed in February 2009. The stimulus package is helping, but it is insufficient. Estimates from the Council of Economic Advisers (2009a, 2010) suggest that the stimulus has added over 1.5 million jobs so far and that it may add another 2 million jobs by the end of 2010. But the employment deficit numbers given above are after these job creation effects. Without the stimulus, we would be short even more jobs.

### **Targeted Job Creation Policies Are More Cost-Effective Than Conventional Fiscal Stimulus Policies**

These large employment deficits are difficult to reduce through conventional fiscal stimulus, which focuses on reviving demand for goods and services through tax cuts or increased public spending. Job creation is a by-product of reviving demand. More targeted job creation policies, which directly increase jobs relative to GDP, are much less costly per job.

In the \$787 billion fiscal stimulus package, the average cost of creating one job per year was \$112,000. Tax cuts are estimated to cost \$145,000 per job created, state fiscal relief is estimated to cost \$117,000 per job created, and direct federal government spending is estimated to cost \$92,000 per job created (Council of Economic Advisers 2009a). The “Cash

for Clunkers” program has an estimated cost per job created of \$86,000 (Council of Economic Advisers 2009b). “Cash for Caulkers” is estimated to have a cost per job created of \$80,000 (Hendricks et al. 2009). Increases in unemployment benefits have an estimated cost per job created of around \$95,000.<sup>2</sup>

With costs of about \$100,000 per job created, it is difficult to have a conventional fiscal stimulus package large enough to significantly reduce our employment deficits.<sup>3</sup> Suppose we wanted to create 5 million jobs in 2010 and 4 million jobs in 2011, which would address a little less than half of the expected employment deficits in those years. At a cost per job created of \$100,000, the fiscal stimulus package necessary to reach these job goals would total another \$900 billion. But the new fiscal stimulus/job creation packages that are thought to be currently politically

---

### **The current and proposed fiscal stimulus plans cannot create enough jobs at politically acceptable costs to meet the current job needs in the United States.**

---

feasible are much smaller. For example, in December 2009 the U.S. House of Representatives passed by only five votes a \$154 billion jobs/fiscal stimulus package. Perhaps a bigger stimulus package can be considered, but a package close to the size of the original stimulus seems politically implausible.

Targeted job creation policies are more cost-effective than conventional fiscal stimulus because these targeted policies encourage employers to increase the ratio of jobs to GDP. Targeted job creation policies are around three times as cost-effective as conventional fiscal stimulus: \$35,000 per job versus \$100,000. The recent Job Creation Tax Credit proposal, which would provide employers with a wage subsidy for payroll expansions, has a gross cost per job created of \$29,000 (Bartik and Bishop 2009). One public service jobs program, the Minnesota Emergency Employment Development program (MEED), has a gross cost per

job created of \$34,000 (Bartik 2009). Other public service jobs proposals have a gross cost per job created of \$40,000 (Economic Policy Institute 2009). Finally, “work sharing” proposals (Abraham and Houseman 2009), which encourage employers to reduce working hours rather than lay off workers, have a gross cost per job saved of \$32,000 (Baker 2009).

The net costs of job creation programs will be reduced because more jobs and greater GDP will increase tax revenues and reduce social spending. Targeted job creation proposals may have fiscal benefits of about \$20,000 per job created (Bartik and Bishop 2009), which reduces the net cost to about \$15,000 per job created. Due to larger effects on GDP, conventional fiscal stimulus will have larger fiscal benefits: \$40,000 per job created.<sup>4</sup> Net costs of conventional fiscal stimulus per job created will then be around \$60,000, but targeted job creation is still four times as effective in creating jobs, per dollar of net costs.

### **Options for a Job Creation Package**

A possible stimulus package targeted only at job creation could include three components: 1) tax credits for employers creating jobs, 2) payments to employers for work sharing, and 3) public service job creation (see Table 1). This package would aim to create 5 million jobs in 2010 and 4 million jobs in 2011, filling a little less than half of the expected jobs deficit in each year. The gross cost of this package, as counted by the Office of Management and Budget and the Congressional Budget Office (CBO), would be \$276 billion, with a little over half of that for 2010. However, after accounting for the package’s effects in increasing tax revenue and reducing social spending, the net cost of this two-year package would be only \$108 billion. The gross cost per job created is around \$30,000; the net cost is about \$12,000.

Compared to the original fiscal stimulus of \$787 billion, this job creation stimulus would have a gross cost only one-third as much. However, it would create 9 million “job-years” (5 million in 2010, 4 million in 2011)—about one-third greater than the original fiscal

**Table 1 A Possible Jobs Package**

Effect analyzed	Year	Job creation tax credit	Job sharing tax credit	Public service employment	Total
Jobs created (millions)	2010	2.8	1.3	0.9	5.0
	2011	2.3	0.7	1.0	4.0
	Two-year total	5.1	2.0	1.9	9.0
Gross costs (\$, billions)	2010	80	43	31	154
	2011	67	21	34	122
	Two-year total	147	64	65	276
Net costs (\$, billions)	2010	13	30	17	60
	2011	14	15	19	48
	Two-year total	27	45	36	108

NOTE: Gross costs are costs as counted by budget agencies, without allowing for any effects of programs on job creation and GDP generation. Net costs allow for estimated increases in jobs and GDP and resulting effects on tax revenue and social spending.

SOURCE: Estimated effects for the Job Creation Tax Credit are from Bartik and Bishop (2009); for work sharing, Baker (2009); for public service jobs programs, my unpublished estimates for MEED (see Bartik [2009] and references therein).

stimulus's estimated effect of creating 6.8 million "job-years." (One job created for one year is one "job-year.") About half of the package would be a tax credit for employers adding to payroll, one-quarter would go to subsidies encouraging employers to offer work sharing, and one-quarter would go to the creation of public service jobs.

Tax credits for job creation and subsidies for work sharing could very quickly be put into effect. And contrary to some comments (McArdle 2009), it is feasible to expand public service jobs quite quickly to the 1.1 million job slots of this package.<sup>5</sup> During the Great Depression, the Civil Works Administration created 4.3 million jobs in two months, and the Works Progress Administration created 2.7 million jobs within eight months (Kesselman 1978; Howard 1943). More recently, in 1983 MEED created the equivalent nationally of 500,000 jobs within six months.<sup>6</sup> Rapid public service job creation is quite feasible if government administrators are given strong incentives to reach job creation goals in a timely fashion.

What if policymakers want fiscal stimulus to also achieve other goals in addition to job creation? For example, they may also want to extend access to unemployment benefits or maintain state and local public services. A fiscal

stimulus package can also achieve these goals, but only at higher costs or some sacrifice of job creation. We could add \$100 billion to the package in conventional fiscal stimulus, which at \$100,000 per job would create about 1 million jobs. We could then still create 9 million jobs if we reduced job creation stimulus to \$246 billion. The fiscal stimulus package would then have to be \$346 billion to achieve the same job creation goals. Alternatively, we

---

**Targeted job creation policies  
are around three times as  
cost effective as conventional  
fiscal stimulus: \$35,000  
per job versus \$100,000.**

---

could keep the overall package at \$276 billion by letting the \$100 billion in conventional fiscal stimulus replace \$100 billion in targeted job creation stimulus. But then the package's job creation would be lowered from 9 million jobs to 6.7 million jobs.

Policymakers must decide the importance of job creation versus other goals of fiscal stimulus. If it is important to create a significant number of jobs at politically feasible costs—and economic research suggests that short-term job creation is important to long-term economic prospects—then targeted job

creation policies should be a major part of any new fiscal stimulus package.

### Notes

1. The long-run loss of earnings due to unemployment is at least one-fifth of the short-run effects. For example, displaced workers suffer a 25 percent loss of earnings in the year of displacement. Ten years later, displaced workers still suffer a 6 percent earnings loss (Stevens 1997). As another example, graduating from college in a year with 1 percent higher unemployment initially reduces the graduate's wages by 6 percent. Fifteen years later, these unlucky graduates' wages are still 2.5 percent lower (Kahn forthcoming). As a final example, when state employment declines, about two-thirds of the drop is reflected initially in state residents having a lower employment-to-population ratio (one-third is reflected in lower state population). After 17 years, the employment-to-population ratio in the state is still lower, by about 25 percent of the initial shock to employment (Bartik, 2001, pp. 141–145).

2. This is based on taking the midpoint of the CBO's November 2009 estimates that such transfer payments have a GDP multiplier somewhere between 0.8 and 2.2. I also use the Council of Economic Advisers' estimates (2009a) that a 1 percent increase in GDP is needed to induce 1 million new jobs. At current GDP levels of \$14.2 trillion, this implies a GDP per job created figure of \$142,000. Dividing by 1.5 yields \$95,000.

3. The reason conventional fiscal stimulus measures cost \$100,000 per job created can be explained intuitively: they only indirectly boost job creation by increasing output demand. Suppose one dollar of fiscal stimulus increases demand for GDP by one dollar (a multiplier of 1.0), and that a boost to GDP increased job creation by the average ratio of GDP to jobs, which is \$105,000 (Council of Economic Advisers 2009a). Then the cost per job created of conventional fiscal stimulus would be \$105,000. Some conventional fiscal stimulus may have multipliers greater than 1, which would lower the cost per job created. But boosts to GDP during a recession may raise GDP by a greater percentage than employment by increasing weekly work hours and worker productivity per hour. Even with fiscal multipliers of 1.5, it is difficult for the cost per job created to be much less than \$100,000.

4. Based on CBO data, Bartik and Bishop (2009) estimate fiscal benefits of 38 percent of the GDP boost. If conventional fiscal stimulus has a GDP-to-job created ratio of \$105,000, then fiscal benefits per job created will be 38

percent of \$105,000, which is around \$40,000. Targeted job creation proposals have lower effects on GDP per job created, which reduces their fiscal benefits to around \$20,000 per job.

5. To create 0.9 million jobs through public service jobs requires somewhat more job slots. The model assumes some substitution of public service job slots for jobs that would have been created anyway, as well as some multiplier effects of this spending for public service jobs.

6. Personal communication between the author and former MEED administrators.

## References

- Abraham, Katharine, and Susan Houseman. 2009. "Short-Time Compensation is a Missing Safety Net for U.S. Economy in Recessions." *Employment Research* 16(3): 3.
- Baily, Martin Neil. 2009. "Putting Americans Back to Work: Competing Visions for Job Creation." Testimony to the Senate Democratic Policy Committee, December 16, Washington, DC. [http://www.brookings.edu/~media/Files/rc/speeches/2009/1216\\_job\\_creation\\_baily/1216\\_job\\_creation\\_baily.pdf](http://www.brookings.edu/~media/Files/rc/speeches/2009/1216_job_creation_baily/1216_job_creation_baily.pdf) (accessed January 7, 2010).
- Baker, Dean. 2009. *Job Sharing: Tax Credits to Prevent Layoffs and Stimulate Employment*. Report for the Center for Economic and Policy Research, Washington, DC. <http://www.cepr.net/index.php/publications/reports/job-sharing-tax-credit/> (accessed January 7, 2010).
- Bartik, Timothy J. 2001. *Jobs for the Poor: Can Labor Demand Policies Help?* New York and Kalamazoo, MI: Russell Sage Foundation and W.E. Upjohn Institute for Employment Research.
- Bartik, Timothy J. 2009. "Adding Labor Demand Incentives to Increase Employment for the Disadvantaged." *Employment Research* 16(3): 7.
- Bartik, Timothy J., and John H. Bishop. 2009. "The Job Creation Tax Credit." Economic Policy Institute Briefing Paper No. 248. Washington, DC: Economic Policy Institute. <http://www.epi.org/publications/entry/bp248/> (accessed January 7, 2010).
- Congressional Budget Office (CBO). 2009. *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output as of September 2009*. CBO report, November, Washington, DC. <http://www.cbo.gov/ftpdocs/106xx/doc10682/11-30-ARRA.pdf> (accessed January 7, 2010).
- Council of Economic Advisers (CEA). 2009a. *Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009*. CEA report, May, Washington, DC. [http://www.recovery.gov/Documents/Jobs\\_Report\\_Final.pdf](http://www.recovery.gov/Documents/Jobs_Report_Final.pdf) (accessed January 7, 2010).
- . 2009b. *Economic Analysis of the Car Allowance Rebate System ("Cash for Clunkers")*. CEA report, September, Washington DC. [http://www.whitehouse.gov/assets/documents/CEA\\_Cash\\_for\\_Clunkers\\_Report\\_FINAL.pdf](http://www.whitehouse.gov/assets/documents/CEA_Cash_for_Clunkers_Report_FINAL.pdf) (accessed January 7, 2010).
- . 2010. *The Economic Impact of the American Recovery and Reinvestment Act of 2009, Second Quarterly Report*. CEA Report, January, Washington DC. <http://www.whitehouse.gov/sites/default/files/microsites/100113-economic-impact-arrs-second-quarterly-report.pdf> (accessed January 14, 2010).
- Economic Policy Institute. 2009. *American Jobs Plan: A Five-Point Plan to Stem the U.S. Jobs Crisis*. Economic Policy Institute, Washington, DC. [http://www.epi.org/index.php/american\\_jobs/american\\_jobs\\_plan](http://www.epi.org/index.php/american_jobs/american_jobs_plan) (accessed January 7, 2010).
- Hendricks, Bracken, Benjamin Goldstein, Reid Detchon, and Kurt Shickman. 2009. *Rebuilding America: A National Policy Framework for Investment in Energy Efficiency Retrofits*. Report for the Center for American Progress and Energy Future Coalition, Washington, DC. [http://www.americanprogress.org/issues/2009/08/rebuilding\\_america.html](http://www.americanprogress.org/issues/2009/08/rebuilding_america.html) (accessed January 7, 2010).
- Howard, Donald S. 1943. *The WPA and Federal Relief Policy*. New York: Russell Sage Foundation.
- Kahn, Lisa B. Forthcoming. "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy." *Labour Economics*.
- Kesselman, Jonathan R. 1978. "Work Relief Programs in the Great Depression." In *Creating Jobs: Public Employment Programs and Wage Subsidies*, John Palmer, ed. Washington, DC: Brookings Institution, pp. 153–229.
- McArdle, Megan. 2009. "This Is Not Your FDR's Federal Government." Blog entry at *The Atlantic*. [http://meganmcardle.theatlantic.com/archives/2009/12/this\\_is\\_not\\_your\\_fdrs\\_federal.php](http://meganmcardle.theatlantic.com/archives/2009/12/this_is_not_your_fdrs_federal.php) (accessed January 7, 2010).
- Schmitt, John, and Dean Baker. 2009. *The \$1 Trillion Wage Deficit*. Report for the Center for Economic and Policy Research, Washington, DC. <http://www.cepr.net/documents/publications/wage-deficit-2009-12.pdf> (accessed January 7, 2010).
- Stevens, Ann Huff. 1997. "Persistent Effects of Job Displacement." *Journal of Labor Economics* 15(1): 165–188.
- Thoma, Mark. 2009. "Why It Might Take Almost Seven Years for Unemployment to Reach Five Percent." Column for CBS Moneywatch. <http://moneywatch.bnet.com/economic-news/blog/maximum-utility/why-it-may-take-almost-seven-years-for-unemployment-to-reach-five-percent/306/> (accessed January 7, 2010).
- Timothy J. Bartik is a senior economist at the Upjohn Institute.*