Evaluating the Fiscal Stimulus

Kevin M. Murphy

January 16, 2009
A Framework for Thinking about the Stimulus Package

- Let $G =$ increase in government spending
- $1 - \alpha =$ value of a dollar of government spending ($\alpha$ measures the inefficiency of government)
- Let $f$ equal the fraction of the output produced using “idle” resources
- Let $\lambda$ be the relative value of “idle” resources
- Let $d$ be the deadweight cost per dollar of revenue from the taxation required to pay for the spending
When Will the Stimulus Add Value?

The net gain is the value of the output produced less the costs of the inputs and the deadweight loss.

In terms of the previous notation we have:

\[
\text{Net Gain} = (1-\alpha)G - [(1-f)G + \lambda fG] - dG
\]

\Rightarrow \quad \text{Net gain} = (f(1-\lambda) - \alpha - d)G

A positive net gain requires that:

\[f(1-\lambda) > \alpha+d\]

Difference of opinion comes from different assumptions about \(f\), \(\lambda\), \(\alpha\), and \(d\).
My View

• $\alpha$ likely to be large
  • Government in general is inefficient
  • The need to act quickly will make it more inefficient
  • The desire to spend a lot in a short period of time will make it more inefficient
  • Trying to be both stimulus and investment will make it even more inefficient

• $1-f$ likely to be positive and may be large
  • With a large fraction of resources employed (roughly 93%) much will be drawn from other activities rather than “idle” resources
  • Ricardian equivalence implies that people will save to pay for future taxes reducing private spending
My View (Continued)

- $\lambda$ is non-zero and likely to be substantial
  - People place positive value on their time
  - Unemployed resources produce value through relocation (e.g. mobility & job search)
- d is likely to be significant
  - Wide range of estimates of d
  - Estimates based on the analysis of taxable income imply $d \approx 0.8$
- With these parameters the stimulus package is likely to be a bad idea