How big (small?) are fiscal multipliers?

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Are fiscal multipliers big or small? That is the question ...

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Existing literature

Estimates of government expenditure multiplier:

- Blanchard and Perotti (2002): around 1
- Fatas and Mihov (2001): larger than 1
- Perotti (2004): -2.3 to 3.7 (depending on country and time period)
- Uhlig and Mountford (2005): 0.3
- Elmendorf and Furman (2008): 1.0
- Barro and Redlick (2009): 0.6

Limitations

- Evidence from a small number of countries
- Little cross-sectional evidence
- Almost none outside OECD
- Little attention to composition of government spending
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- High-debt versus low debt
- Government consumption versus public investment
44 countries: 20 high-income, 24 developing
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Empirical question

- What is the impact on GDP of a $1 increase in government expenditure?

\[
\text{Impact Multiplier} = \frac{\Delta GDP_0}{\Delta G_0}
\]

\[
\text{Cumulative Multiplier} = \frac{\sum_0^T \Delta GDP_t}{\sum_0^T \Delta G_t}
\]

- Long-run multiplier defined as the cumulative multiplier once both impulse responses have died down.
Output response to a 1% shock to government spending

High income

Developing countries
Fiscal multipliers: High income versus developing countries

High Income Countries

Impact: 0.37  Long Run: 0.80

Developing Countries

Impact: -0.21  Long Run: 0.40
Fiscal multipliers: Fixed (predetermined) versus flexible

Impact: 0.09

Long Run: 1.5

Impact: -0.28

Quarters

Flex

Long Run: -0.41
Monetary policy response under fixed versus flexible
Fiscal multipliers: Open versus closed economies

Impact: 0.02
Long Run: 1.29

Impact: -0.28
Long Run: -0.75

Quarters

Closed

Open
Fiscal multipliers: High versus low debt

Debt/GDP < 60% (High Income)

Impact (top to bottom):
0.73, 0.06, -0.18

Debt/GDP < 60% (Developing)

Long Run (top to bottom):
0.41, 0.25, -2.3

Debt/GDP > 60%

Quarters

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Fiscal multipliers: Public investment

- **Impact:** 0.41 (Long run: 1.13)
- **Impact:** 0.57 (Long run: 0.75)
Output effect of tax rates
(work in progress with G. Vuletin and D. Riera-Crichton)
Size of fiscal multiplier critically depends on country characteristics:

- Fixed versus flexible exchange rates
- Open versus closed
- Low versus high external debt

Fiscal-monetary interactions critical in determining effectiveness of fiscal stimulus

Composition of government spending matters

As emerging markets move to greater exchange rate flexibility, countercyclical fiscal policy may become less relevant

But, insofar as "fear of floating" exists, avoid procyclical fiscal policies commonly observed in developing countries
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