Cutting Back on Labor Intensive Goods? Implications for Fiscal Stimulus
Summary

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Overview

Fiscal stimulus programs are a common tool used to fight recessions. In this paper, I show that the effectiveness of fiscal stimulus as a tool for counter-cyclical stabilization depends not only on *how much* of changes in income households spend, but also on the *composition* of their expenditure. By combining expenditure and production data I measure the extent to which households cut back expenditure on labor-intensive goods upon unemployment. I find that, upon unemployment, a household reduces demand for other workers' labor by 6.5%, 15% of which is explained by the composition of the expenditure bundle changing. During the Great Recession, the expenditure response to unemployment accounts for a fifth of the drop in labor compensation. My findings are also important for the targeting and empirical assessment of fiscal policy.

Empirical Evidence

Using national accounts data and the Consumer Expenditure Survey I document several new facts. First, I show that the labor share with which different final consumption goods are produced varies widely across the economy. While 78 cents per dollar spent on education flow to workers, labor compensation is only 23 cents per dollar spent on housing. Second, households respond to unemployment disproportionately cutting back expenditures on goods that can be home-produced (e.g. food away from home, domestic services) or that are work-related (e.g. clothing, transportation). Third, there is a negative correlation between the expenditure response to unemployment of different goods and the labor share with which they are produced.

A Model to Assess the Implications of the Expenditure Response to Unemployment

To account for these facts, I build and calibrate a model featuring rich heterogeneity in the consumption and production sides of the economy. On the production side of the economy, there are three sectors with different labor shares producing two consumption goods and one investment good. On the consumption side, households are heterogeneous on wealth, productivity, and employment status. Furthermore, unemployed households engage in home production, which induces a disproportionate reduction in their market demand for the labor-intensive good. Nominal rigidities in the price setting of final goods determine the strength of the aggregate demand externality. The model is completed with labor unions and fiscal and monetary authorities.

Selected Findings

- The correlation between labor share and expenditure response upon employment is 0.6. Alternatively, ten additional points in the labor share with which a good is produced are associated to an increase in expenditure of two percentage points upon employment.
- Government purchases of the labor-intensive consumption good are almost five times more effective at raising output than government purchases of the capital-intensive consumption good. They are also 30% more effective than purchases of the investment good.
- Ignoring heterogeneity in consumption and production, leads to underestimate the size of the fiscal multiplier by 50% for government purchases of the labor-intensive good, but to overestimate the multiplier of capital-intensive purchases by 130%.
- Accounting for heterogeneity explains quantitatively the gap between estimates of the fiscal multiplier using military spending (fairly capital-intensive good) and nondefense government purchases (very labor-intensive good).
- The decline in the labor share over the last 20 years has reduced the effectiveness of fiscal policy and has increased the difference between the multipliers of government purchases of labor and capital-intensive goods.