Heterogeneous Fiscal Multipliers and Regional Inequality

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Motivation

Understanding whether fiscal policy has heterogeneous effects across regions is crucial in assessing its role not only as a macroeconomic stabilizer but also as a spatial equalizer. Fiscal multipliers may vary significantly depending on regional characteristics such as labor market slack, financial development, or access to credit. If poorer or more credit-constrained regions experience larger output responses to government spending, then fiscal policy could play an important role in reducing regional inequality.

Chodorow-Reich (2019) provides evidence that fiscal multipliers are stronger in areas with more slack in the U.S., while theoretical insights from Woodford (2011) suggest that multipliers are larger when private agents are more constrained in their ability to smooth consumption or investment. These dynamics may be especially relevant in developing or unequal countries, where poorer regions often face tighter borrowing constraints and limited access to formal credit. Whether fiscal expansions in such areas reduce or exacerbate spatial inequality remains an open and important empirical question — one with direct implications for fiscal policy design in countries with pronounced regional disparities.

Research Question

Are fiscal multipliers stronger in poorer or more credit-constrained regions? Do regional differences in multiplier effects translate into reductions—or amplifications—of spatial inequality?

Methodology Overview

This project proposes to estimate the heterogeneous effects of fiscal policy across regions with varying levels of poverty and credit access. The empirical strategy would involve:

- Constructing a panel dataset of subnational regions with data on government spending (e.g., public investment, transfers), regional GDP or employment, poverty rates, and credit indicators (e.g., loan volumes, bank density, interest rates).
- Estimating regional fiscal multipliers using fixed effects models or shift-share instruments for spending shocks.
- Interacting fiscal shocks with baseline regional characteristics to test for heterogeneity in effects.
- Evaluating whether stronger multipliers in poor or constrained regions are associated with reductions in output or employment gaps over time.

Limitations and Challenges

A number of empirical challenges may arise in the implementation of this research. First, the endogeneity of government spending poses a risk to identification, as allocations may systematically target economically lagging regions, creating potential reverse causality. To address this, the study would need to employ instrumental variables, discontinuities in funding formulas, or plausibly exogenous shocks such as natural disasters. Second, measuring credit constraints at the regional level is not straightforward. While ideal firm-level data are rarely available, proxies such as bank branch density, loan-to-deposit ratios, or interest rate spreads may serve as imperfect indicators of local financial frictions. Third, the presence of inter-regional spillovers through migration, trade, or supply chains could bias local fiscal multiplier estimates if the effects of spending extend beyond the treated region. Finally, data limitations may restrict the scope of the analysis: many countries lack detailed subnational records on public spending and credit conditions, which could constrain the precision or generalizability of the findings.

References

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