

Discussion of Unintended Consequences of Tax Cuts in South Africa

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January 26, 2024

The views expressed herein are solely those of the author and do not necessarily reflect the views of the Central Bank of Chile

The Paper: Main Theme

- ▶ **Question:** Macroeconomics effect of personal income tax changes in South Africa.
- ▶ **Answer:** Non-MTR ↓ has a negative effect in the short run, but the effects are reversed in the long run.
 - ▶ Q1 to Q7: Output ↓ Consumption ↓, Investment ↓, Employment ↓
 - ▶ Q8 to Q20: Output ↑ Consumption ↑, Investment ↑, Employment ↑
- ▶ **Method:** Narrative approach and SVAR (Mertens & Ravn, 2013; Romer & Romer, 2010)

Paper in Nutshell I: South African Context

- ▶ Personal Income Tax represents a substantial share of total government revenue.
- ▶ A limited share of the population pays the tax. Around half of registered individuals earn enough to be taxable. 27% of revenues come from the top 2%.
- ▶ South Africa is one of the most unequal countries in the world.

Paper in Nutshell II: Methodology

- ▶ Use a narrative approach to find personal income tax change exogenous to the current economic conditions.
- ▶ Construct a measure of personal income tax changes for these episodes:

$$\Delta PIT_t = \frac{\Delta \text{Personal Income Tax Liability}_t}{\text{Personal Taxable Income}_t}$$

- ▶ The authors estimate the following SVAR model:

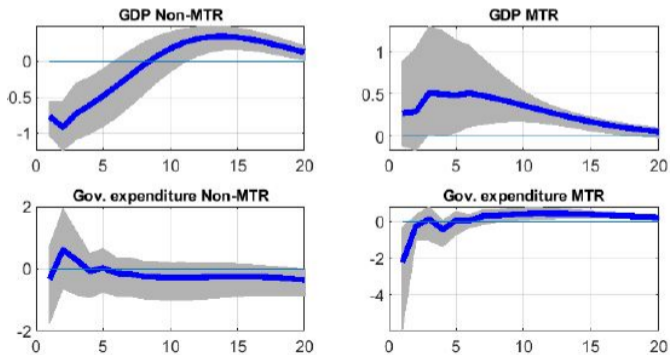
$$Y_t = \sum_{j=1}^2 \delta_j Y_{t-j} + \mathbf{B}\epsilon_t$$

using marginal tax rates (MTR) and non-marginal tax rates changes (Non-MTR) as instruments to identify \mathbf{B} .

Paper in Nutshell III: Results

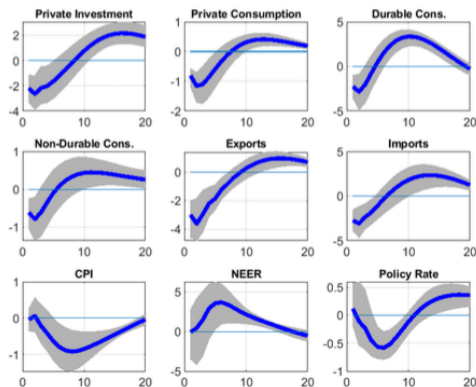
- ▶ A decrease in Non-MTR personal income tax produces a fall in GDP in the short run; meanwhile, MTR changes have positive effects.

Figure 6: Impact of personal income tax cut: NMTR versus MTR



Paper in Nutshell III: Results

- ▶ The authors focus the economics analysis on Non-MTR shocks given data limitations.
- ▶ In the short run: ↓ in Output, Consumption, Investment, and Inflation. ↑ NEER



Paper in Nutshell IV: Possible Mechanism

- ▶ Debt Financing:
 - ▶ Tax cuts are financed through government debt → exchange rate appreciation
→ export sector contraction.
 - ▶ Public debt crowds out private investment.
- ▶ Labor Channel
 - ▶ Aggregate employment contraction with considerable heterogeneity by sector.
- ▶ Demand Channel
 - ▶ Contractionary effects in consumption, investment, exports, and imports.

Comments I: Relevant topic for inequality and emerging economies.

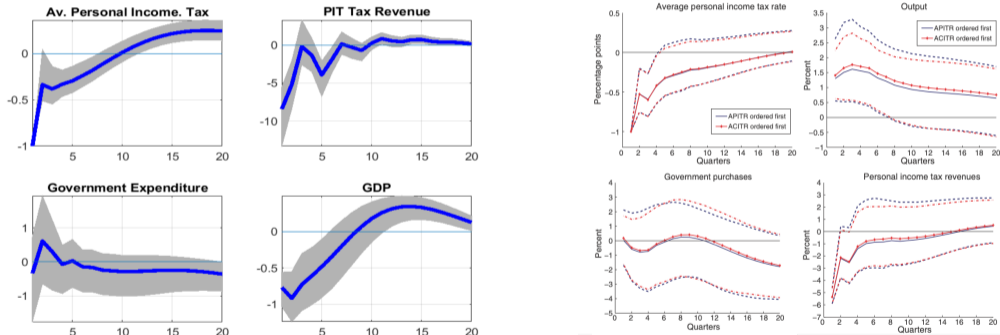
- ▶ Very interesting and important topic! The results open many questions to explore in more detail.
- ▶ Highlight the importance of studying emerging economies and not generalizing results from advanced economies.
- ▶ In emerging economies, income tax is constantly proposed to reduce inequality at the cost of reduced output. **The result question this!**
- ▶ What are the short and long-run effects of change in income taxes on country inequality?

Comments II: Tax Changes and Exogeneity.

- ▶ Discuss in more detail the difference between Non-MTR and MTR shocks. Why use them separately? What makes the output response different in magnitude and sign?
 - ▶ An event study analyzing the impact of MTR shocks on various macroeconomic aggregates or an SVAR examining the interplay among taxes, output, and each macroeconomic variable one at a time would help to understand the differences.
- ▶ An important number of exogenous shocks in the paper are fiscal drags, which could reflect current economic conditions or policies that could impact the economy for many periods as they are government choices.
 - ▶ Does the result persist if we take out these observations?
 - ▶ Test Granger causality using multiple lags. Use some information criteria to choose them.

Comments III: Compare with other countries' results

- ▶ In the short-run, the results are very different from what is found in the US by Mertens and Ravn (2013).



- ▶ In both cases, government spending remains constant, and government debt increases. What is different between the US and SA that creates these different results?

Comments IV: Others

- ▶ Test whether a sector's contraction depends on its exposure to exports and domestic debt.
- ▶ If the results are driven by government deficit and exchange rate appreciation. Do the negative outcomes disappear for emerging countries that match revenues and spending?
 - ▶ Chile can be an example of a commodity exporter country that follows this type of rule.

References I

- Mertens, K., & Ravn, M. O. (2013). The dynamic effects of personal and corporate income tax changes in the united states. *American economic review*, 103(4), 1212–1247.
- Romer, C. D., & Romer, D. H. (2010). The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks. *American Economic Review*, 100(3), 763–801.