Deficits and Inflation

G.M. Angeletos, C. Lian and C. Wolf

Discussion by Karel Mertens (FRB Dallas)

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The views expressed do not necessarily reflect the views of the Federal Reserve Bank of Dallas or the Federal Reserve System.

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This Paper

How and by how much does inflation responds to deficit shocks?

- Ricardian Equivalence
- Non-Ricardian models
 - (NK +) Fiscal Theory of the Price Level NPV of surpluses provides nominal anchor
 - HANK (Blanchard 1985 perpetual youth) Monetary policy provides nominal anchor

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Inflationary Effects of Pandemic Transfers



Comments

Deficit Shocks: What Policy Configuration Delivers Better Outcomes?

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- Persistent Deficits and Debt Dynamics
- A Look at Debt Dynamics in the GFC and Pandemic
- Gausal Effects of Deficit Shocks: An Empirical Exploration

Textbook NK

Conventional wisdom ($\phi >$ 0, $au_d >$ 0) unambiguously delivers better outcomes.



ω = 1, φ = 0.25 (-0.25), $τ_d = 0.10$ (0), $τ_y = 0$, $ρ_ε = 0$, κ = 0.20, β = 0.99, $D^{ss}/Y = 2$

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HANK (Perpetual Youth)

Hawkish monetary policy makes inflation more persistent Active fiscal ($\phi < 0, \tau_d = 0$) arguably delivers better outcomes.



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Textbook NK and Persistent Deficit Shock

Debt dynamics now qualitatively different (Canzoneri, Cumby, Diba (2001))



ω = 1, φ = 0.25 (-0.25), $τ_d = 0.10$ (0), $τ_y = 0$, $ρ_ε = 0.75$, κ = 0.20, β = 0.99, $D^{ss}/Y = 2$

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Perpetual Youth NK and Persistent Deficit Shock

Debt dynamics still qualitatively different with wealth effects



 $\omega = 0.85, \ \phi = 0.25 \ (-0.25), \ \tau_d = 0.10 \ (0), \ \tau_y = 0, \ \rho_e = 0.75 \ , \ \kappa = 0.20, \ \beta = 0.99, \ D^{\rm ss}/Y = 2$

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Debt, Deficits and Inflation in the GFC



Debt, Deficits and Inflation in the GFC



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Debt, Deficits and Inflation in the Pandemic



Debt, Deficits and Inflation in the Pandemic



Debt, Deficits and Inflation in the Pandemic



Common (parsimonious) framework explaining both episodes challenging.

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Empirical Effects of Deficit Shocks: An Exploration

What are debt dynamics following a deficit shock empirically?

- Quarterly 1960-2024 VAR in S/Y^{pot} , D/Y^{pot} , Y/Y^{pot} , π , where S is primary surplus and D is market value of government liabilities
- Instrument with 'cyclically-adjusted' innovations in primary surplus

$$(S/Y^{pot})^{innov} = \tau_y (Y/Y^{pot})^{innov} - \text{deficit shock}$$

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[Similar to Blanchard and Perotti 2001]

- Consider $\tau_y = 0$, 1, or 2
- Think of Canzoneri, Cumby, Diba (2001) as $\tau_y = 0$.



Not an AD shock, surely reverse causality.

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 $\tau_y = 1$ (OLS estimate)

Deficit shock is AD shock (sort of), real market value of government debt increases.



Deficit shock is AD shock, real market value of government debt declines.



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This is an excellent, thought-provoking paper.

• Very important work on existential questions in monetary/macro

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• Important to know the "how" as well as the "how much"