r-g<0: Can We Sleep More Soundly?

Mauro and Zhou

Discussion by

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Overview

Global r has been declining.

Public debt accumulates *autonomously* at a rate of ***r-g***

If ***r-g*** < 0, do we no longer have to worry about debt?

Mauro and Zhou: Not so fast.

- ***r-g*** < 0 is the norm, not an irregularity
- ***r-g*** doesn't predict default

Excellent data work

Convincing on both counts

Conceptual Framework

Accounting identities ➔

$$\Delta d_{t+1} \approx (r - g)\, d_t + def_t$$

Debt will decline as long as growth-interest differential *sufficient to cover deficits:*

$$(g - r) > \frac{def}{debt}$$

Application: USA

Past 10 years

g(nominal) = 4%

r(nominal) = 2.5%

g - r = 1.5%

<

Deficit/Debt = 8%

Currently

g(nominal) = 2%

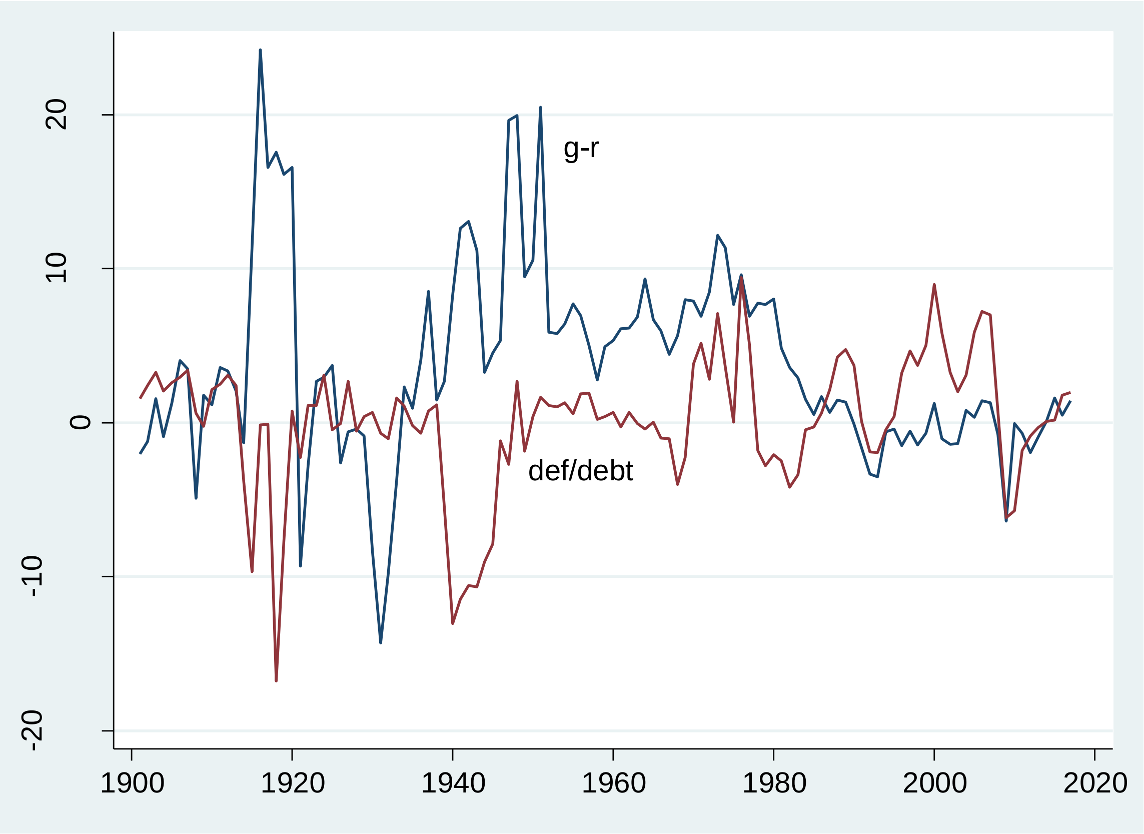
r(nominal) = 1.8%

g - r = 0.2%

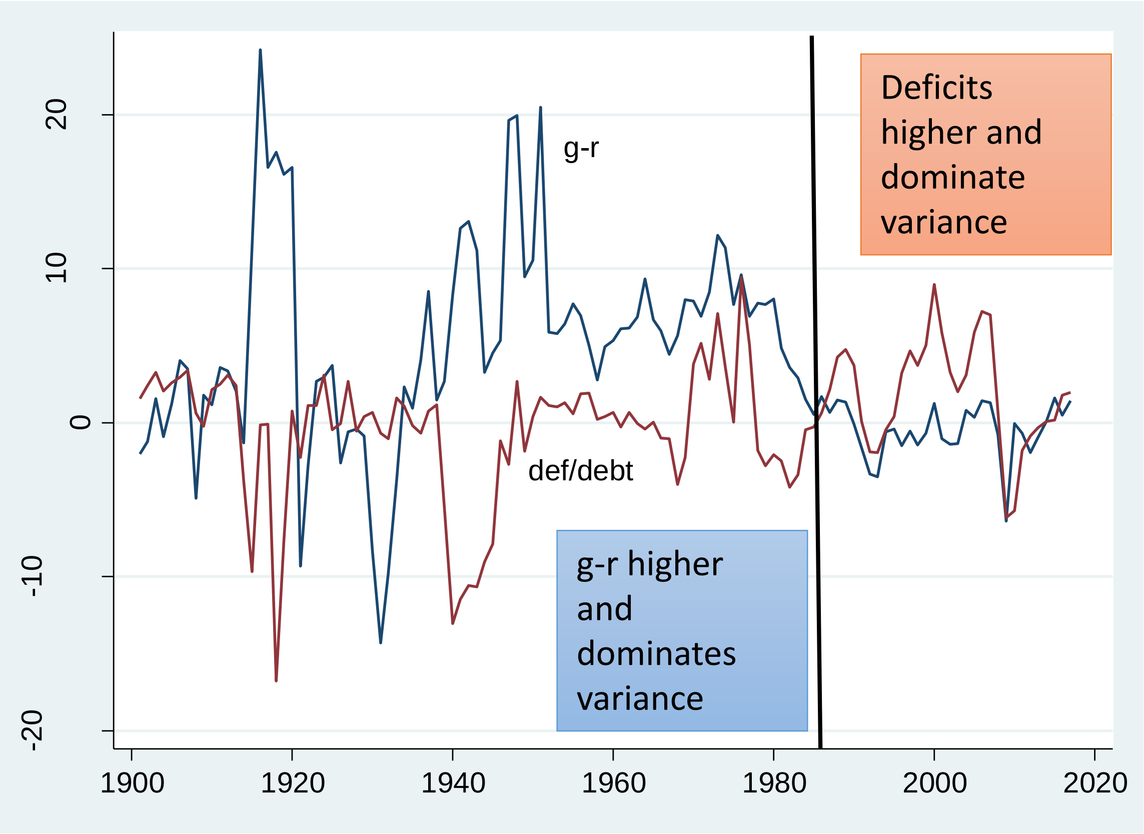
<

Deficit/Debt = 6%

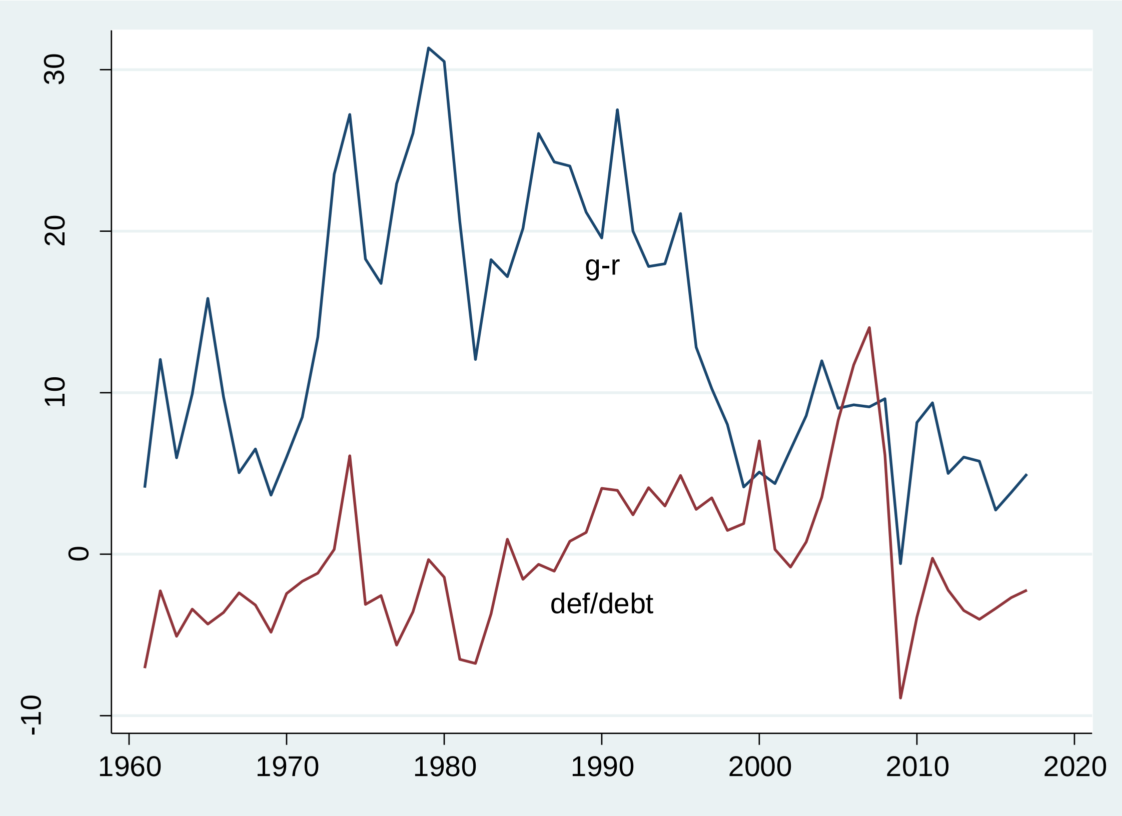
g-r vs. Deficits: High Income



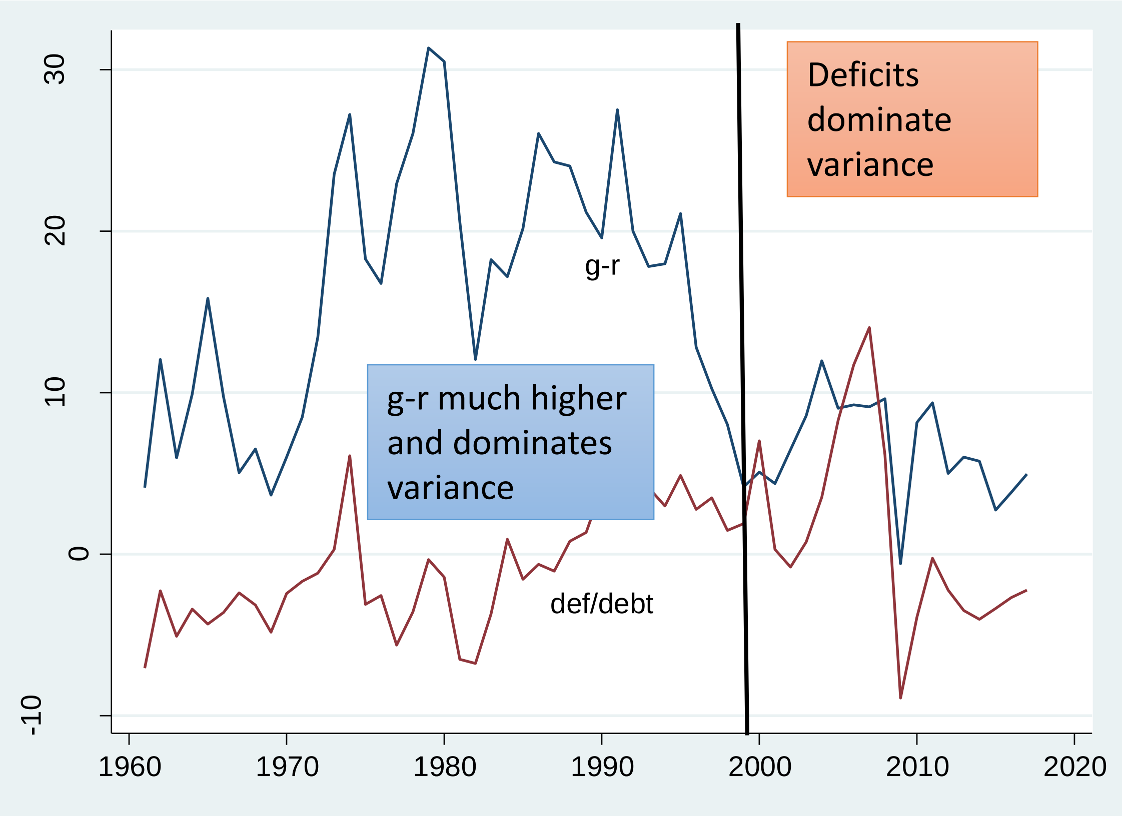
g-r vs. Deficits: High Income



g-r vs. Deficits: Developing



g-r vs. Deficits: Developing



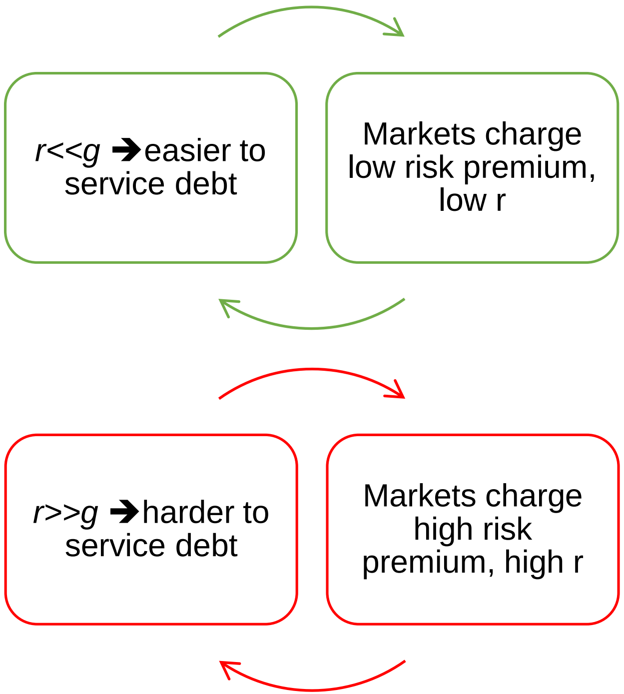
Conceptual Problems with Debt Sustainability Accounting Exercises

Given r, g, deficit: debt sustainability merely accounting

But r, g, deficit are all determined in equilibrium:

- g ←→ deficit
- Multiple equilibria in r
- …..

Multiple Equilibria in r



Cf. Calvo (1988); Cole&Kehoe (2000); Aguiar et al (2012).

Political Equilibrium in Deficit and r

Policymaker equalized marginal benefit and cost of public debt

- Marginal costs: probability of default or spiking risk premia
- Marginal benefits: benefits of ↑ public spending and ↓ taxes

With low *r-g*, optimizing policymaker will increase deficits until prob(crisis) outweighs economic/political benefit of deficit

Reduced risk doesn't follow from low *r-g*