DEBT-DEPENDENT EFFECTS OF FISCAL EXPANSIONS

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1. What is the question of this paper?

   Should policymakers facing weak economic performance and high government debt pursue an expansionary fiscal policy? This paper wants to clarify this question.

2. Why should we care about it?

   For policy makers, if they could be sure that the fiscal expansions are less stimulative when government debt is high than when it is low, the policy makers could use the fiscal expansions to reach the goal that they want to achieve. And the policy makers could choose the properly expansionary fiscal policy to stimulate the economy.

3. What is the answer?

   The result that assuming the hybrid GHH preference and income tax adjustments, supports the conventional view that government spending is less expansionary when it is highly indebted. In a high-debt state, expecting higher future taxes implies a stronger negative wealth effect on consumption, weakening the short-run stimulative effect of a government spending increase. For a longer horizon, both a higher tax level and a larger increase in tax rates make investment and labor respond more negatively in a high-debt state than in a low-debt state, producing a more negative output response.

   The result that a high-debt state makes government spending less expansionary, however, is not robust to alternative specifications. When the wealth effect on labor supply is sufficiently strong, such as with the KPR preference, or when fiscal adjustments involve government spending reversals, it repeals another pattern that it is possible that government spending becomes more expansionary in a high-debt state than in a low-debt state in the short run.

4. How did the author get there?

   The authors adopt a neoclassical growth model that can accommodate both the GHH and KPR preferences and simulate the responses to a government spending increase in the low- and high-debt state.

5. List of notations
   (1) $\tilde{c}_t$: effective consumption
   (2) c_t: private consumption
   (3) g_t: government spending
   (4) ω: the weight of private consumption in effective consumption
   (5) l_t: labor
   (6) i_t: Investment
   (7) k_t: capital
   (8) b_t: one-period government bond
   (9) q_t: bond price
   (10) τ_t: income tax rate
   (11) w_t: real wage rate
   (12) r_t^k: rental rate for capital
   (13) z_t: government transfers
   (14) X_t: index variable
   (15) ψ: the magnitude of the wealth effect on labor supply
   (16) δ: Depreciation rate
   (17) $\frac{\kappa}{2}(\frac{i_t}{k_{t-1}} - \delta)^2$: capital adjustment cost
   (18) a_t: factor productivity
   (19) rs_t^z: regime index
   (20) p_1^z, p_2^z: transition probabilities
   (21) ϕ: share of adjustments by spending cuts
   (22) s_t^{b*}: debt level exceeds some threshold value

6. Example

   2008 年金融風暴所引起的經濟衰退，造成希臘財政赤字擴大，出

   現主權債的倒債危機，是故 2009 年希臘開始採取財政緊縮政策，

   但希臘國民因反對緊縮開支措施而發起上街示威，一直到 2011 年

   6 月底，希臘政府勉強通過新一輪的緊縮開支方案，從而獲得歐

   盟領袖承諾提供援助支持希臘經濟，該國引發的危機才得以受到

   控制。