

Greenwich Political Economy Research Centre



# The Short-run and Long-run Theoretical Inconsistency of the Expansionary Austerity Theory

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## Outline of the Presentation

1. The expansionary austerity theory (EAT): most relevant aspects
2. Empirical critique to EAT
3. Theoretical critique to EAT
  - 3.1) Short-run analysis
  - 3.2) Long-run analysis
4. Conclusions

# 1. The Expansionary Austerity Theory: Main Aspects

1. Well-designed austerity packages: cut in public spending (cut in transfer and public wages/employment) and/or downsizing the social safety net + (expected/forthcoming) reduction in taxation.
2. Main channels: ‘regime shift’/‘expectation’ channel; ‘financial market’ channel; internal devaluation/CA channel.
3. Empirical validation: change in CAPB as measures of policy shocks to explain short-to-medium run economic dynamics

## 2. Empirical Critique to EAT

1. CAPB measures do not exclude some cycle-related components of public balance from computation.
2. Economic Policy endogeneity to business cycle.
3. Business cycle-dependent fiscal multiplier

### **3.Theoretical Critique to EAT/1: Previous contributions**

1. A few, mainly argumentative, contributions (Boyer, 2012).
2. In-built contractionary effects of austerity policies (Palley, 2010).
3. Austerity measures not precisely defined and austerity identified with an ex-ante (uncertain!) reduction in fiscal deficit (Foresti and Marani, 2014)

### **3.Theoretical Critique to EAT/2: Aims of the present work**

1. Short-run analysis: Under which conditions “*even sharp reductions of budget deficits have been immediately followed by sustained growth even in the very short run* (Alesina, 2010)”?
2. Long-run analysis: Is it theoretically consistent the idea that “*the medium to longer-term benefits of well-designed fiscal consolidation are typically accompanied by short-run costs in the form of output losses [but] the long-term benefits outweigh the short-term costs* (Warmedinger et al., 2015)”?

### 3.Theoretical Critique to EAT/3: Some equations of the present model

1. Permanent income-type assumption:  $s = f(t^e, Tr^G)$  with  $\partial s / \partial t^e > 0$ ;  $\partial s / \partial Tr^G < 0$

2. Wage-setting, price-setting rules and real exchange rate:

$$w = (1 - \tau_w(z)) p^e \alpha \quad p_H = (1 + m(r^d / y^e)) w / \alpha \quad q = e p_F / p_H$$

3. *Expectation-driven* investment demand:  $I/K = g(y^e, i_H)$

4. Financial channel (1), effects on private loans' interest rate:  $i_H = (1 + \mu) i_d$

6. Financial channel (2), effects on sovereign bonds' interest rates:  $i_d = i + \sigma(B/Y, \Omega)$

With:  $\partial \sigma / \partial (B/Y, \Omega = 1) > 0 \quad \partial \sigma / \partial (B/Y, \Omega = 0) = 0$

$\Omega = 1$ : non-monetarily sovereign economy (NMSC)

$\Omega = 0$ : monetarily sovereign economy (MSC)

### 3.1 Theoretical Critique to EAT: Short-run policy exercise/1

(a) Cut in  $Tr^G$  and expected reduction in taxes  $t^e$  in order to (CAPB)  $db^* = -\theta$

$$dy^S = \frac{\overbrace{\left[ f_{t^e}(1-t)\eta \left( \bar{\omega} \frac{\beta}{\alpha} + \rho \right) \right]}^{+ \text{ or } 0} |dt^e| - \overbrace{\left[ (1-s) - f_{Tr^G} \left( \bar{\omega} \frac{\beta}{\alpha} + \rho \right) \right]}^{-} \eta Y^* \theta + \overbrace{g_{i_H}(1+\mu) \frac{Y^*}{\beta y} \sigma_b \theta}^{+ \text{ or } 0}}{\left\{ \left[ \beta - (1-s)(1-t)\eta \frac{\beta}{\alpha} (\omega - \bar{\omega}) \right] - g_{i_H}(1+\mu)\sigma_b \left[ \frac{t\omega + (1-t)\bar{\omega} + b}{y} \right] \right\}}$$

$$db^S = -\frac{Y^* \theta}{\beta y} - [t\omega + (1-t)\bar{\omega} + b] \frac{dy^S}{y}$$

1. Austerity hardly expansionary with high public debt ( $dTr^G \ll 0$ ) and  $dt^e$  not to come soon.
2. Financial channel not at work in monetarily sovereign countries or with QE
3. Relevance of impact effect of austerity (see below)



### 3.1 Theoretical Critique to EAT: Short-run policy exercise/2

#### (b) Cut in unemployment subsidies:

$$dy^{S2} = \frac{\{(1-s)(1-t)\eta(\beta/\alpha)[(1-y)\bar{\omega} + \omega y \varepsilon_{w,\bar{w}}] + (\eta_q \Gamma + \epsilon) \overbrace{(\partial q / \partial w)(\partial w / \partial \bar{w})}^? d\bar{w} - g_{i_H}(1+\mu)\sigma_b(\beta/\alpha)[(1-t)(\delta-y)\bar{\omega} + ty\omega \varepsilon_{w,\bar{w}}]\} d\frac{\bar{w}}{w}}{\left\{ \beta - (1-s)(1-t)\eta \frac{\beta}{\alpha} (\omega - \bar{\omega}) \right\} - g_{i_H}(1+\mu)\sigma_b [t\omega + (1-t)\bar{\omega} + b]/y}$$

$$db^{S2} = \frac{\beta}{\alpha} [(1-t)(\delta-y)\bar{\omega} + ty\omega \varepsilon_{w,\bar{w}}] \frac{d\bar{w}}{\bar{w}} - [t\omega + (1-t)\bar{\omega} + b] dy^{S2}$$

1. Expansionary outcomes strongly depend on domestic productive and export structure, hence responsiveness to the real exchange rate
2. Internal devaluation might be useful only in highly integrated RER-sensitive economies

## 3.2. Long-run dynamics in expectations and debt-to-GDP ratio $d/1$

- Adjustments in expectations based on discrepancy between expected and realized capacity utilization:

$$\widehat{y}^e = \phi(y - y^e) = \phi(y(y^e, d) - y^e)$$

Self-stabilizing  $y^e$  (first) scenario:  $(\partial y / \partial y^e - 1) < 0$

Self-destabilizing  $y^e$  (second) scenario:  $(\partial y / \partial y^e - 1) > 0$

- Dynamics of the debt-to-GDP ratio  $d$ :

$$\hat{d} = \frac{\xi(y(y^e)/\beta y(y^e))}{d} + \frac{\psi(d)/\beta y(y^e)}{d} - \left\{ \varepsilon_{y,y^e} \widehat{y}^e + \varepsilon_{y,i_H} \widehat{i}_H(d) - (1 - \varepsilon_{y,q}) \widehat{P}^H(y^e) - g(y^e, i_H) \right\}$$

EAT-like assumption: high debt sets instability (via  $i_d$  and  $i_H$ ) in NMSC:

$$\hat{d} = f \left( \begin{array}{c} y^e \\ \underbrace{\quad}_{-} \\ d \\ \underbrace{\quad}_{-/+} \end{array} \right)$$

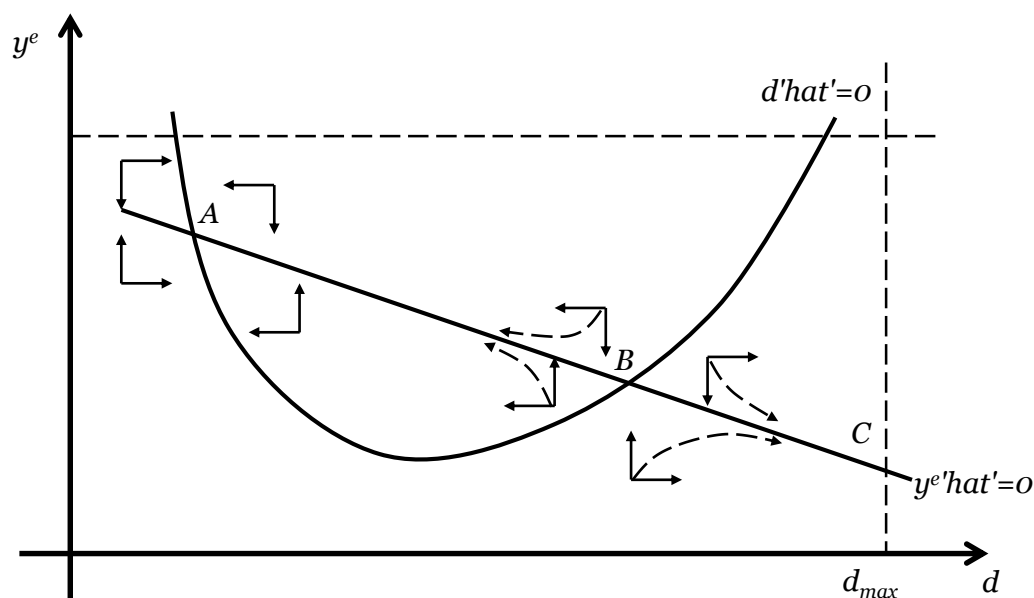
## 3.2. Long-run dynamics in expectations and debt-to-GDP ratio $d/2$

### First multiple equilibria scenario in NMSC

A (stable): low debt and high capacity utilization

B (unstable): high debt and low capacity utilization

C: debt default

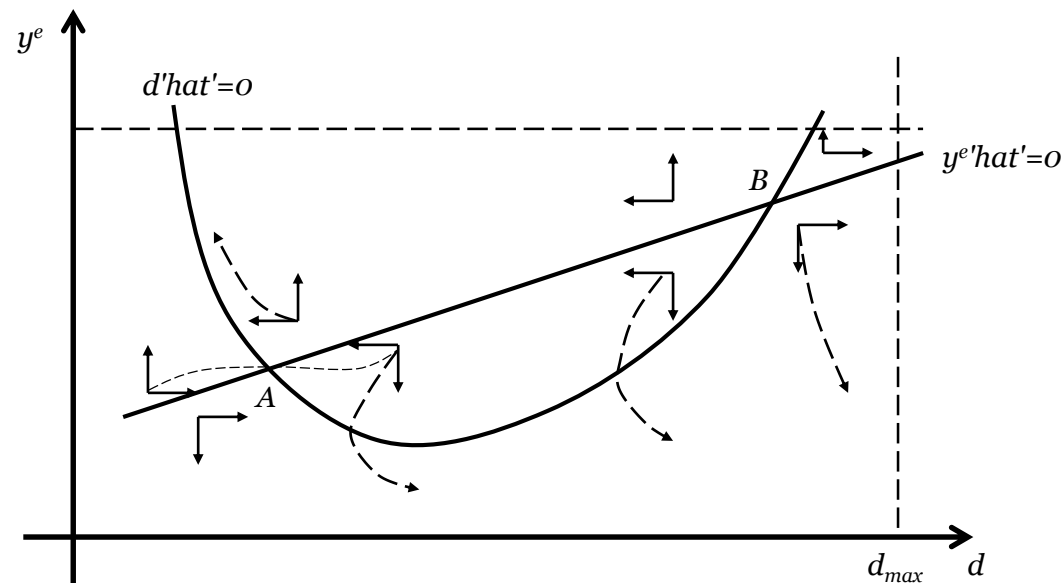


## 3.2. Long-run dynamics in expectations and debt-to-GDP ratio $d/3$

### Second multiple equilibria scenario in NMSC

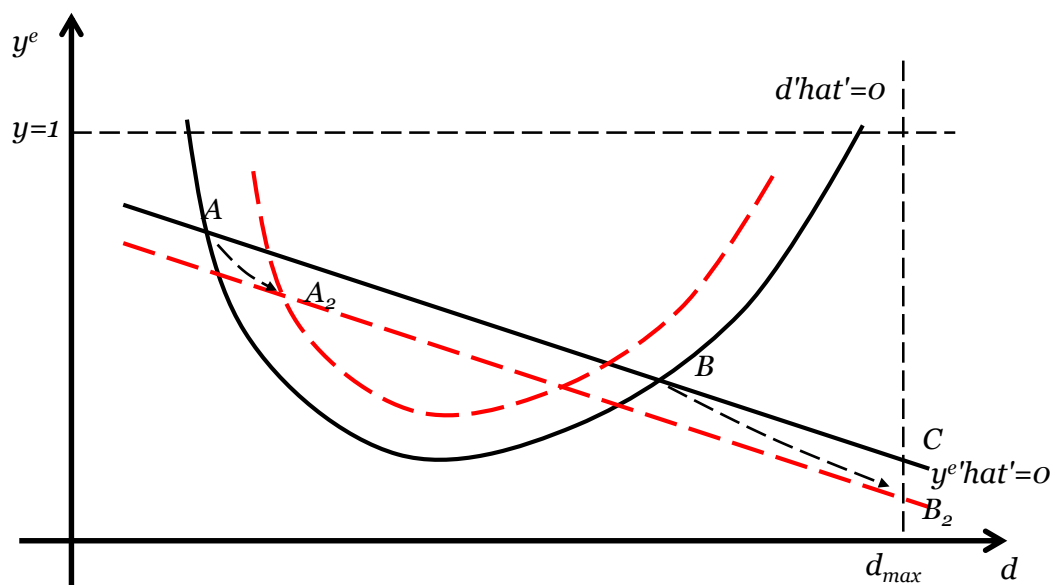
Widespread instability

Divergence toward maximum capacity utilization-low-debt **or** collapsing economic activity-exploding debt



## 3.2 Austerity-driven 'highway to hell-1' (AC/DC, 1979)

Long-run consequences of short-run austerity-led costs in scenario 1

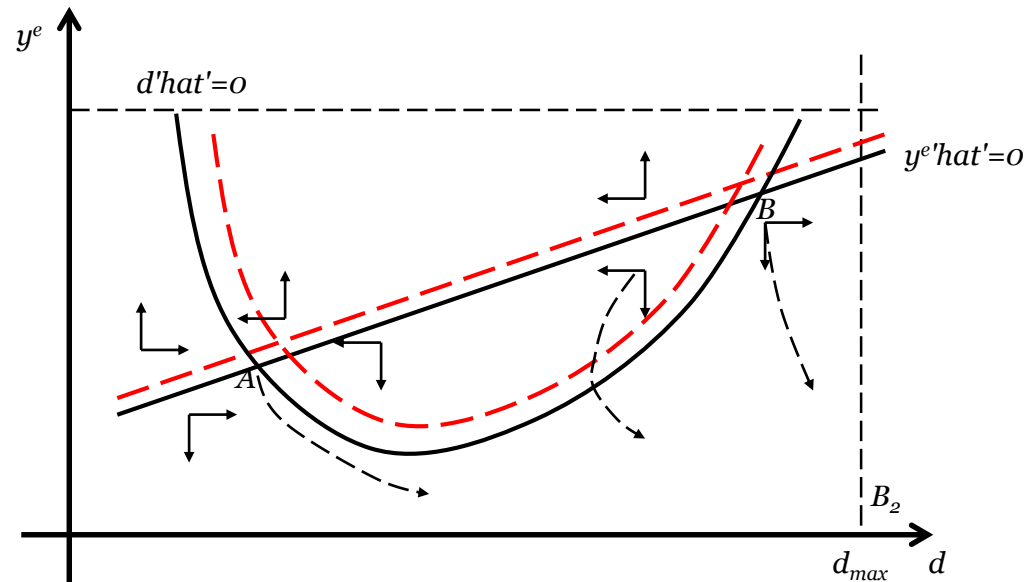


From  $A$  to  $A_2$ : Lower economic activity and higher debt-to-GDP ratio

From  $B$  to  $B_2$ : Collapsing economic activity and public debt default

### 3.2 Austerity-driven 'highway to hell-2' (AC/DC, 1979)

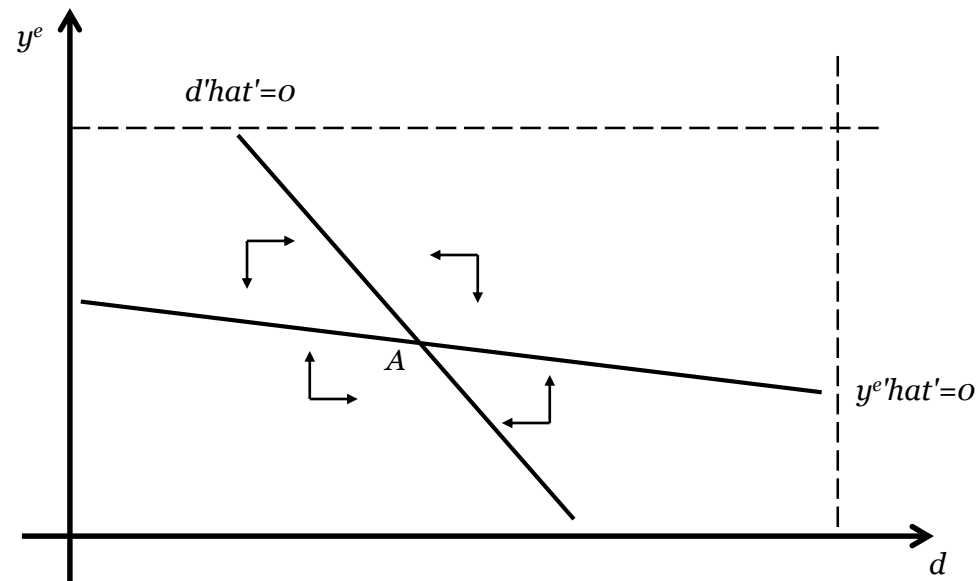
Long-run consequences of short-run austerity-led costs in scenario 2



Instability emerging even at initially low debt-to-GDP ratios

## 3.2 In search for alternatives to AC/DC and instability

Then get 'comfortably numb (Pink Floyd, 1979)' to public debt and become monetarily sovereign



## 4. Conclusions

### **Result:**

Given EAT assumptions themselves, short-run costs and long-run benefits mutually inconsistent. Austerity, in order to work, must be expansionary on the very onset.

### **Policy implications:**

1. In highly indebted countries, debt relief comes first (and perhaps fix fiscal profligacy later if it was effectively at the roots of the problem).
2. Monetary policy might not prompt recovery by itself. But 'full monetary sovereignty' may stabilize the system.
3. Best strategy is to grow out of the debt (public investment banks supporting investments)



**Thank you**