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Financing for Development: Beyond Business as Usual

by

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Finance for Development and Debt Management

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Finance with Endogenous Money

- Money is endogenous (credit-driven)
- The base interest-rate is the main instrument variable of the central bank (from Wicksell to Woodford in 100 years)
- No government can go broke in its own currency (endogenous money/MMT)
- But it can do so in foreign currency (the BoPC)
- There is no limit no the amount of money that can be printed with fiat currency (post Bretton-Woods system)
- But there is a limit to the amount of goods and services that money can buy (the real constraint)
- And before that, finance itself can also be halted by excessive leverage (the financial constraint)

Limits of Foreign Finance (international leverage)

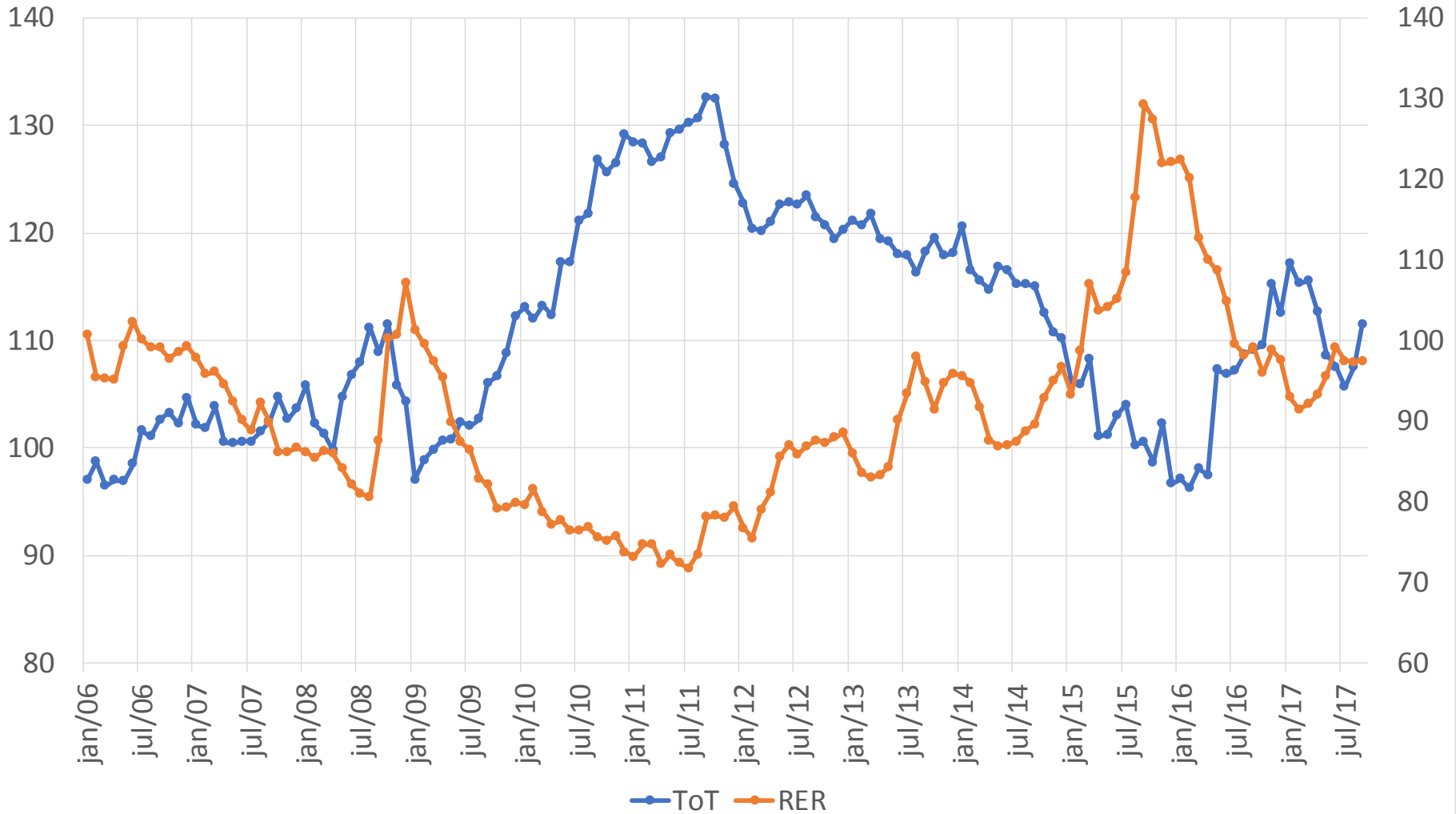Decades of open-economy macro with floating ER taught us something

First: current-account sustainability requires an RER and/or growth rate that does not lead to a Ponzi position (Thirlwall's Law + the financial BoPC)

$$x_t - \varepsilon_t m_t = (h_t - f_{v,t}) + \left(\frac{1+r_t}{1+g_t}\right) d_{F,t} + v_t$$

Second: the real exchange rate depends on interest-rate arbitrage (Dornbusch/UIP) and the state of long-term expectations (yes, Keynes is still valid)

$$\varepsilon_t = \boxed{r_{ft} + \sigma_t - r_t} + \varepsilon_{t+1}^e = \boxed{\varepsilon_{t+N+1}^e} + \boxed{\sum_0^N (r_{f,t}^e + \sigma_t - r_t^e)}$$

carry-trade factor

Long-term RER expectation

carry-trade expectations

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Brazil: Terms of Trade and Real Exchange Rate

Source: BCB and IPEA

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$$y = -29{,}486x^3 + 416{,}91x^2 - 1965{,}5x + 3094{,}1$$
$$R^2 = 0{,}5108$$

Ln(RER)

Ln(ToT)
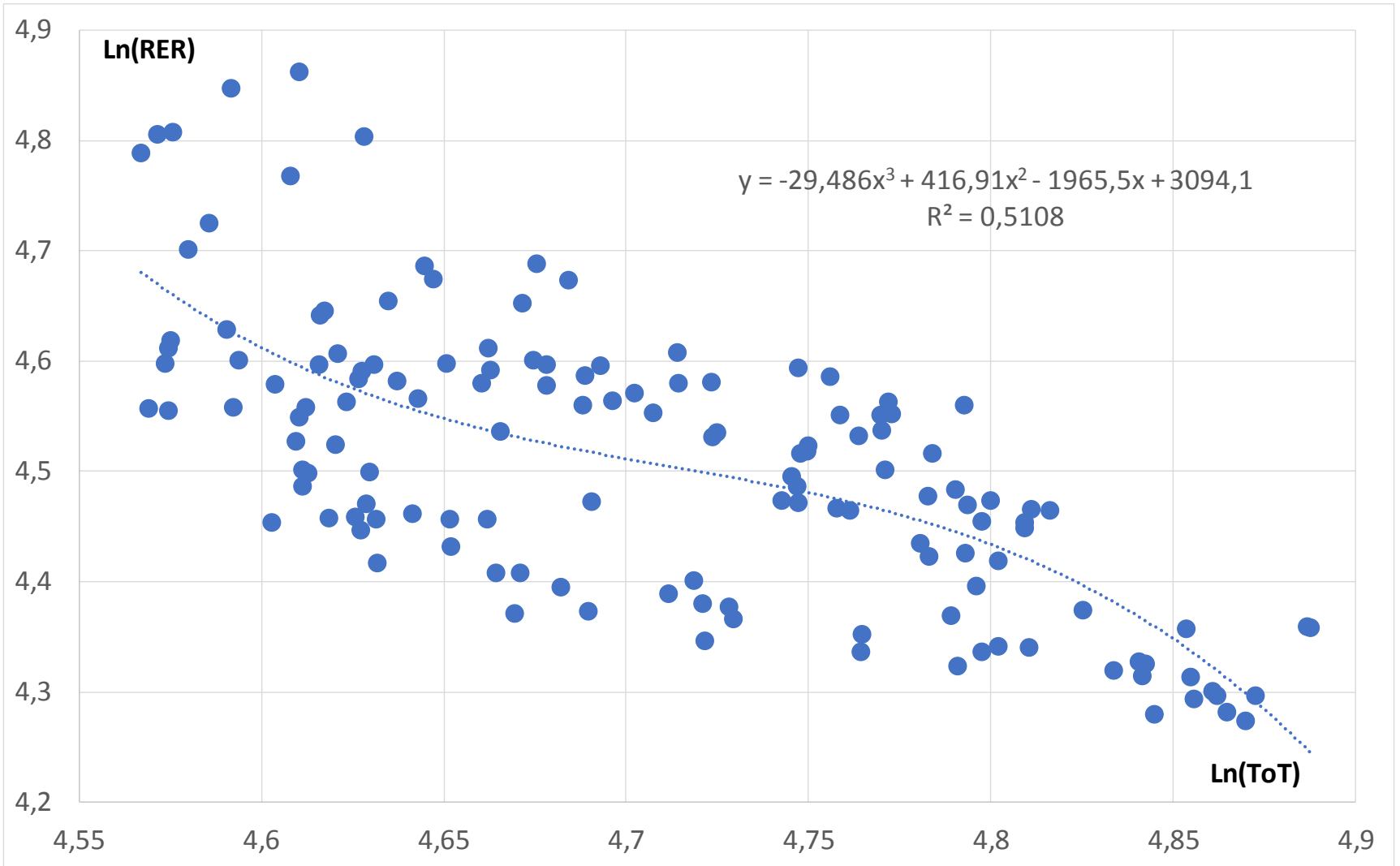
Why international reserves? The currency crises of late 20th and early 21st centuries showed (once more) that international liquidity assistance is not there when needed

Brazil: foreign debt, reserves and current-account deficit

Legend: Gross Foreign debt (red), Foreign reserve assets (blue), Current account deficit (green)

Categories: 1st oil shock (1974), Debt crisis 1 (1982), Debt crisis 2 (1987), Brazilian ER crisis (1998), Lula's Election (2002), 2008 crisis (2008), TODAY (2017)
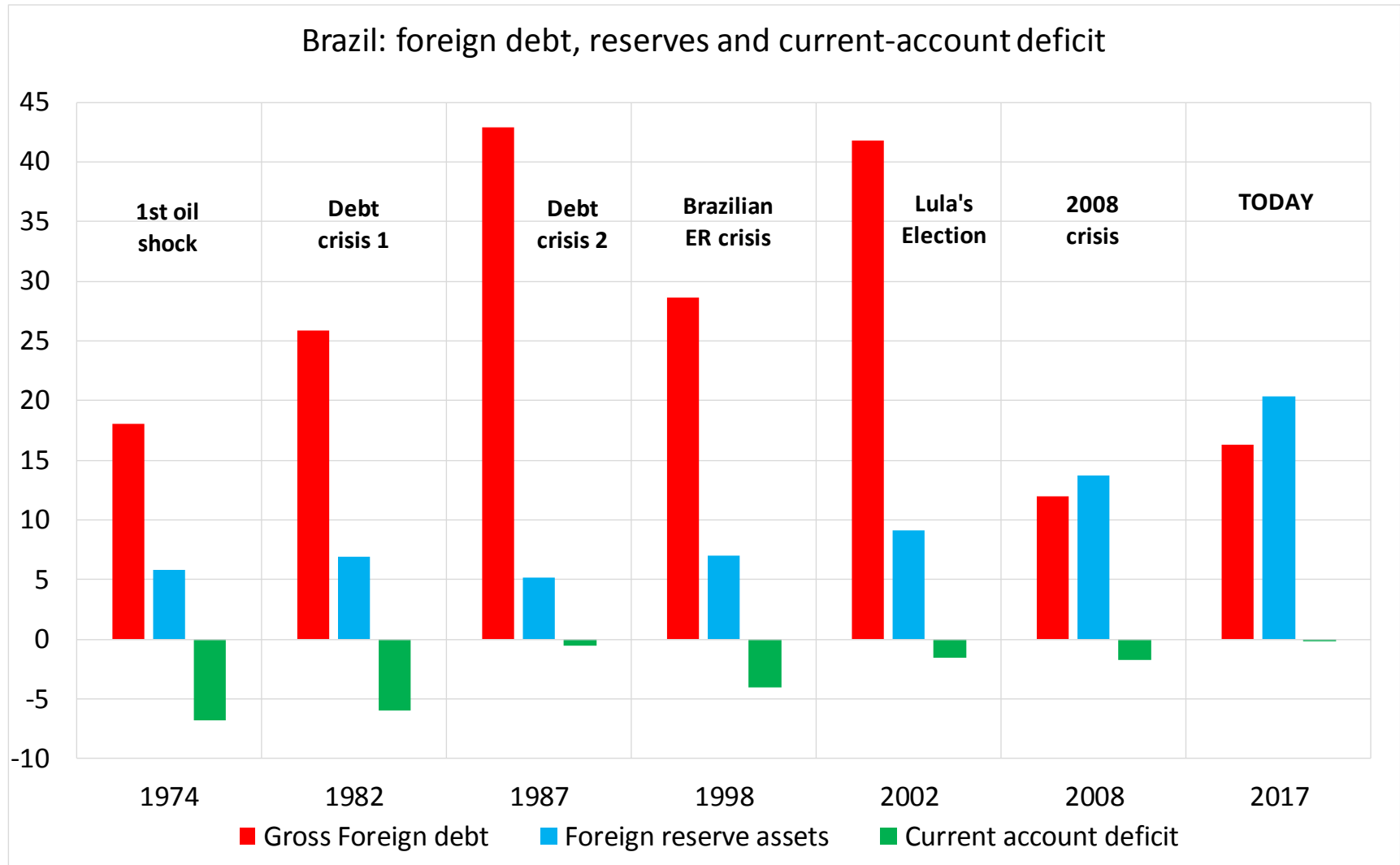
Exchange-Rate Dominance in Developing Countries

There is a clear hierarchy from the exchange rate, to the interest rate to the primary balance (fiscal policy)

- In countries that do not issue foreign-reserve currency, the UIP determines the RER, which in its turn influences both economic growth and inflation

- The inflation target (seigniorage) and the "natural rate of interest" determine the primary balance of the government necessary to stabilize public debt in terms of GDP

- But the same primary balance is compatible with different sizes or roles of the State (political economy)

What should be the size and functions of the State?

Limits of Domestic Public Finance

Public financial stability is usually defined as a stable debt/GDP ratio (the required primary surplus)

$$b_t = \left(\frac{r_t - g_t}{1 + g_t}\right) d_{G,t-1} - s_t$$

The limit on government domestic finance comes from expected primary surpluses and seigniorage (forward solution)

$$d_{G,t} = \left[\sum_{j=1}^{N} (b_{t+j}^e + s_{t+j}^e) \left(\frac{1+g^e}{1+r}\right)^j \right] + d_{G,t+N+1}^e \left(\frac{1+g^e}{1+r}\right)^{N+1}$$

Too much public debt can be restrictive because of the fear of drastic adjustment, even before the economy reaches full capacity ("capital flight" to real or foreign assets).

The long-term primary balance sets the limit to the government's leverage, and its tax base limits its spending (balanced multiplier)

Brazil: Net and Gross Public Debt of the General Government (in % of GDP)
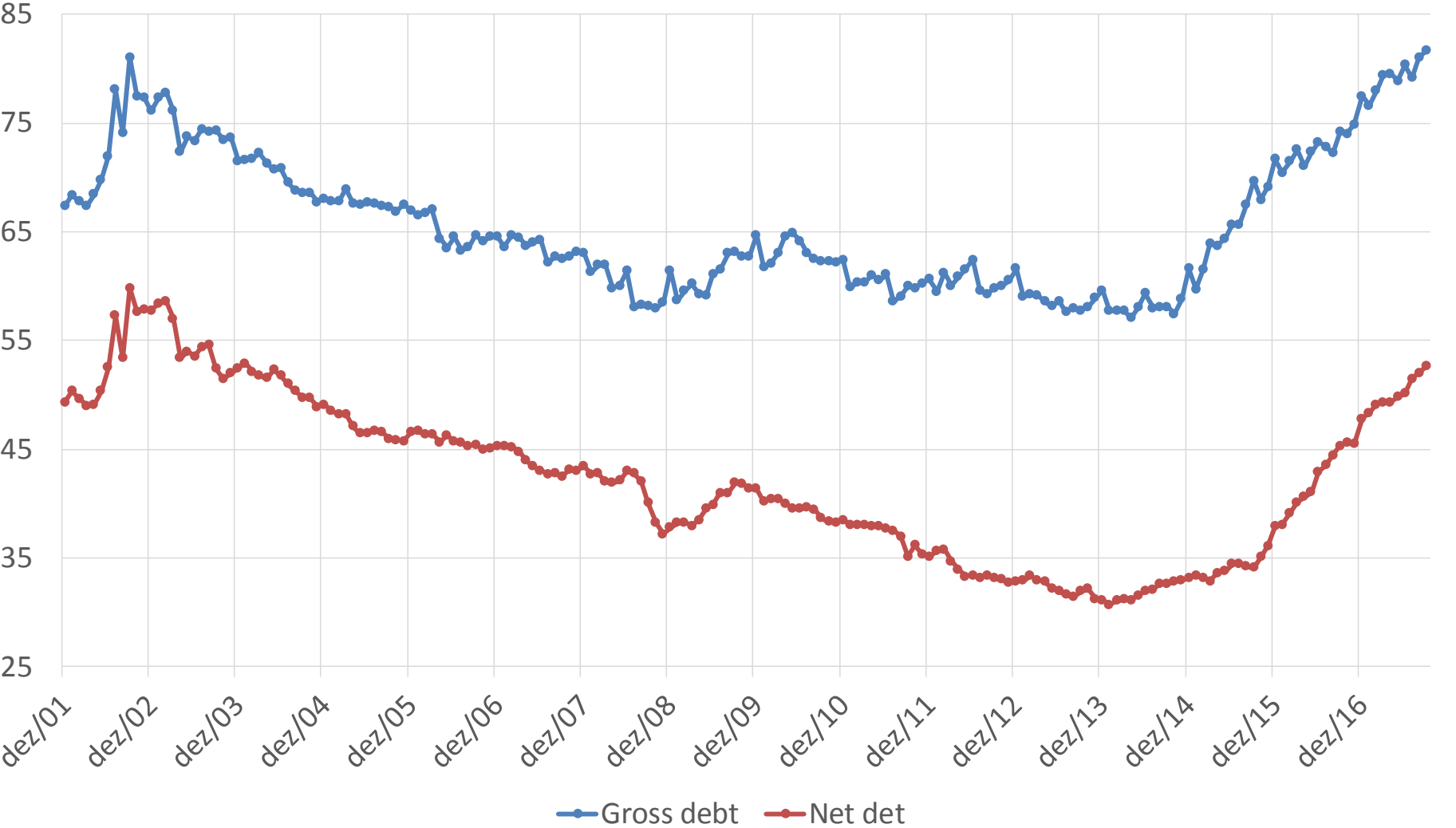
Limits of Domestic Private Finance

By analogy, private debt and equities are claims on expected future income (Tobin's q and leverage)

$$q_t \frac{P_t K_t}{P_t Y_t} = d_{p,t} + w_{p,t}$$

$$d_{p,t} + w_{p,t} = [\pi_{LR}^e - v(g^e + \delta)]\left(\frac{1+g^e}{r-g^e}\right)$$

Expected growth and profits are what backs and generates finance in a system of endogenous money (Keynes/Minsky)

There may be a trade-off between growth and profitability (Marx, Sraffa, Kalecki, Goodwin) if productivity does not accelerate.

Too much debt represents too much fixed-income claims on little expected income, which can stop an expansion before full employment

Effective demand, profits and expectation cycles

U.S. Corporate Bonds+Non-Financial Business Loans Outstanding as a % of GDP vs. S&P 500
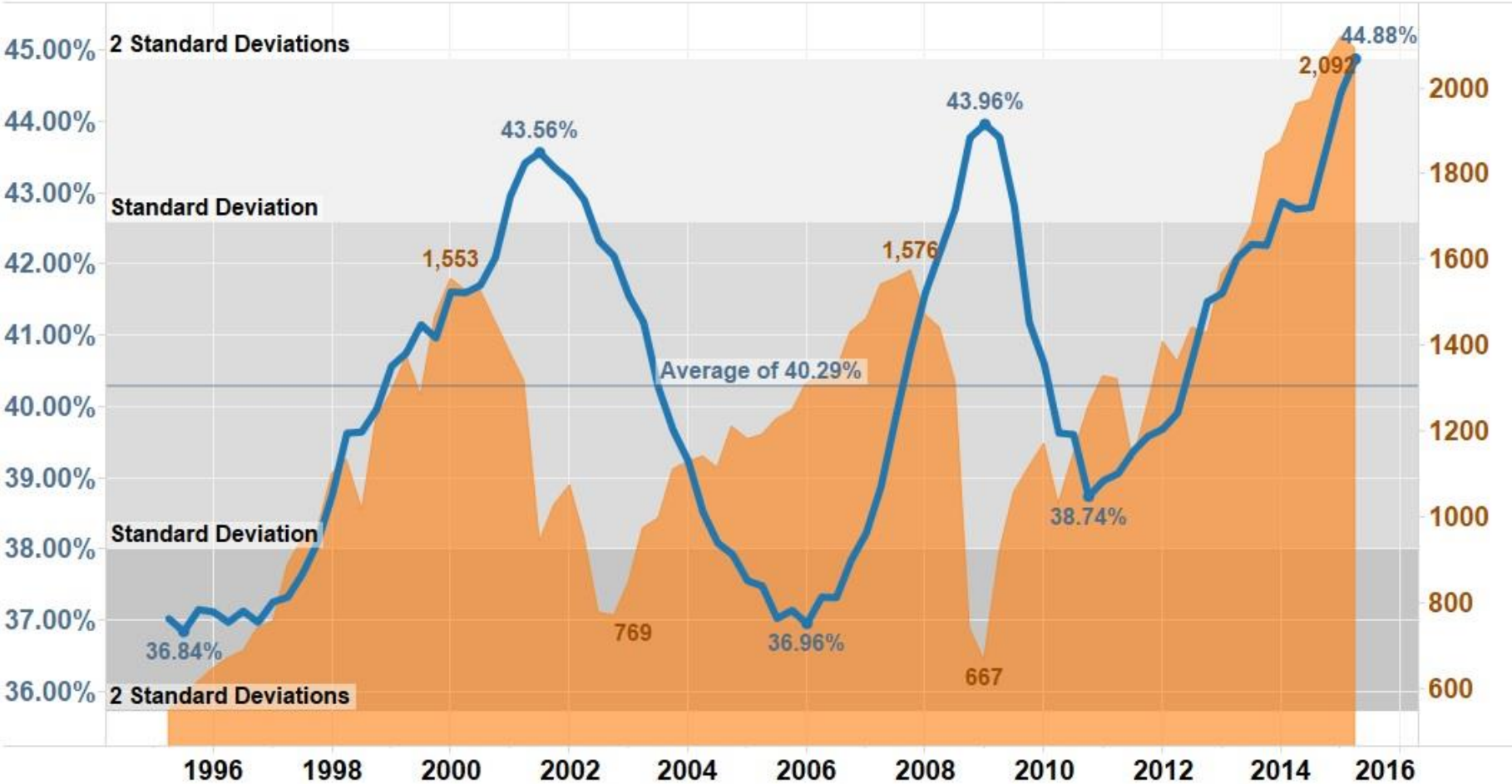
Beyond Business as Usual

Expected growth and profits mobilize finance in a world of endogenous money, not the other way around

Proper fiscal policy can boost growth and profits without creating unsustainable fiscal imbalances

Proper financial regulation and real-wage growth can also push profits, productivity and growth up without excessive leverage (virtuous cycle)

But without this, speculative finance becomes the only autonomous growth-generating engine – the bubble economy – subject to long booms and sudden stops + high inequality