

Thoughts about fiscal policy (Olivier Blanchard, IGIER, January 2021)

1. The traditional view: Dynamics and welfare under $r > g$. A recap.

The dynamics of the debt to GDP ratio:

$$d = (1+r)/(1+g) d(-1) - s$$

To avoid debt explosion

$$d = d(-1) \Rightarrow s = (r-g)/(1+g) d$$

The primary surplus must be sufficient to pay for debt service.

If $r > g$, need a positive surplus. Limit to maximum primary surplus can be achieved.

Debt is sustainable if gvt can generate the corresponding surplus. Thus limit on debt

Higher debt \Rightarrow Higher taxes in the future.

What about welfare?

At potential output, debt crowds out capital accumulation in portfolios.

So welfare cost. Lower capital, lower output in the future

Bad for future generations (even if no tax-induced distortions)

In other words, high debt can be dangerous. And comes at a welfare cost.

2. What happens when $r < g$? Dynamics and welfare under secular stagnation

The dynamics of the debt to GDP ratio:

$$d = (1+r)/(1+g) d(-1) - s; (1+r)/(1+g) < 1$$

$$d = d(-1) \Rightarrow s = (r-g)/(1+g) d < 0$$

Implications for debt sustainability if $r < g$ (**forever**; hint of discussion to come).

Can run a primary deficit and keep debt stable

No matter the primary deficit, debt will not explode

Can issue debt, and never repay (never raise taxes)!

Who pays for the debt, if not future taxpayers? Answer: current and future investors...

Implications for welfare cost of debt?

Crowding out still takes place (if output at potential). How costly?

Low r implies low risk-adjusted marginal product of private capital.

(either because of high saving/low investment ("Savings glut"), or high demand for safety)

Thus, small negative (or even positive !) effect of crowding out on future output.

Small negative or even potentially positive effect on welfare... (AEA lecture 2019)

3. Deficits and debt under secular stagnation and the effective lower bound constraint

Let r^* be the neutral real rate (so that aggregate demand generates demand equal to potential output)

If both $r^* < g$, and low expected inflation: Low i^* , and ELB constraint possibly binds (current situation).

Then, central bank cannot achieve r^* (Assume QE and other interventions are not enough)

Savings glut now means aggregate private demand shortfall

Put simply: $DI + ELB \Rightarrow KU$ (Keynesian unemployment)

Then, more spending is needed to achieve potential output

Now deficits are essential in the short run (because r is not low enough),

and (because $r < g$), debt is sustainable, and not costly in terms of welfare in the long run.

4. How confident can we be that $r < g$ in the future?

Long downward trend for r . (smaller trend for g). Since the mid 1980s.

(1985: an unusual peak.) Not due to financial crisis, to covid crisis. Not due to central banks...

Historically, $r - g < 0$ happens often, but does not last forever.

Is this time different?

Markets are convinced. Yield curve. Nominal 10-year euro: -0.5%. Option prices: $P(i < 4\%) = 97\%$.

Economists have identified many suspects, convicted none.

Savings glut: Demographics: The baby boom versus increased life expectancy.

Current account surpluses and reserve accumulation by EMs.

Investment side: Declining relative price of capital. Two effects

All three ambiguous and could turn around. TFP growth/green investment.

Demand for safe assets

Regulation. Liquidity requirements. Higher risk/risk aversion?

Increased uncertainty? Not obvious. No obvious increase in the equity premium.

The effect of the increase in debt to GDP ratios. Estimates (guesses?) 2-4bp per 1%. 25%=> 50-100bp

4. How to assess debt sustainability in practice?

Unlimited fiscal space? No. If no uncertainty, could issue debt until $r > g$. (Crowding out would decrease capital, increase MPK, increase r)

But uncertainty highly relevant. $(r-g) d$ can move a lot

So how to assess debt sustainability?

Ask: **Given uncertainty, looking n years out, what is the probability that the country cannot generate a sufficient primary surplus to pay for debt service?**

A very useful tool in that context: Stochastic debt sustainability analysis (SDSA)

Distribution of debt and primary surplus n years out.

If do it today, difficult to worry about debt sustainability.

A short cut: Guess $(r-g)^*$ s.t. $P(r-g < (r-g)^*)$ close to 1. Then, is the required primary surplus: is it feasible?

For example, $(r-g)^*$ in 5 years $\leq 2\%$ with $P=.95$. $D=100\%$. Forecast primary balance: -1% .

Required adjustment: -1% to 2% . Can it be done?

Note how far we are from EU fiscal rules (60% , 3% , and complications). (paper with JZ, AL)

Not right even when $r > g$. Debt service rather than debt. Max primary surplus

Clearly not right when $r < g$. Role of uncertainty.

6. Some issues not treated, but important to think about.

What about sudden stops, multiple equilibria?

Let p be the probability of default next period. Then, risk neutral investors want to be compensated

Debt dynamics are now given by (set $g = 0$ for visual convenience):

$d = (1+r)/(1 - x p) d(-1) - s$ where x is the haircut if default.

Probability affects the rate, and the rate affects the probability.

Solving out probability as a function of debt is hard. Depends on maturity of the debt. (current work)

Conclusions: Shift from low p to high p is typically very sudden, reflecting the non-linearity.

Probability of default n years out slowly increases

Probability of default next year does not move until it moves suddenly.

Range of multiple equilibria, good and bad. **Very wide, starts at very low d**

Implications for fiscal policy? Not clear. Starting from high d today, unrealistic to aim for very low d .

Some issues not treated, but important and fun to think about (continued).

Multiple equilibria. The role of the central bank:

Can the central bank ensure the good equilibrium? (ECB PSPP for example)

Outside investor with deep pockets can insure good equilibrium

Is the central bank an outside investor, or part of the consolidated budget?

If part of the consolidated budget, and issuing interest paying reserves when buying bonds
does not make any difference to claims against consolidated budget.

(What about ECB? Different because of distribution effects across member countries)

A popular proposal: Should the central banks burn the government bonds in their portfolio?

Answer: **It does not matter...** Two ways of looking at it.

Claims by private investors remain the same.

If burn bonds, receive less interest, turn in less profits back to Treasury.

Treasury pays less interest, receives less profit. A wash.

Some issues not treated, but important and fun to think about (continued).

Should the maturity of public debt be increased?

Decreases rollover risk

Gives more time to adjust in the face of a large increase in rates.

Does it increase risk in private sector (more maturity mismatch?)

QE purchases of long-term bonds against interest paying reserves work in the opposite direction

Tug of war between maturity lengthening and QE. Need at least for coordination

Proper fiscal policy, during and after covid?

Why not give 4,000 dollar checks?

Should Covid debt be reimbursed?

If aggregate demand is strong, what should be tightened first? Monetary or fiscal?

If aggregate demand is weak, should we run deficits as long as needed?

Are there alternatives to deficits to sustain aggregate demand?

“Medicare for all” to decrease precautionary saving?

Some issues not treated, but important and fun to think about (continued).

Public investment. Level and financing (taxes or debt)

Should public investment be increased until $\text{social MPK} = r$? Yes

Should it be automatically financed by debt?

No. Depends on whether there are financial/fiscal returns (user fees...)

If not, need to rely on debt sustainability analysis

And intergenerational considerations

(which generations should pay for lower global warming?)

Articulation between fiscal and monetary policy, post Covid.

Increase inflation and get further away from the ELF

If ELF binds less, move from “functional finance” closer to “pure fiscal policy”, with monetary policy doing more of the adjustment.

If ELF not binding at all, still a role then still a role for fiscal stabilization.

What optimal fiscal/money mix?

Similar effects on GDP, but different effects on allocation/distribution

Goes beyond the exchange rate/trade balance effect.

Some issues not treated, but important and fun to think about (continued).

MMT? I still do not know what it means, and how it differs from mainstream

If proposition that fiscal tool is essential, and can, with monetary policy, be used to maintain output at potential. Agree.

If proposition is that there is no debt limit, and that budget can always be financed through money creation. Disagree.

Either money pays interest, in which case it is equivalent to bond finance

Or it does not, and high money creation eventually leads to high inflation.