

Figure 1: Recession

## 1 Stimulus Experiments

## 1.1 Recession

- We consider a recession with an expected length of 6 quarters
- In a recession the unemployment rate increases to 10 % and lasts on average 4 quarters (as opposed to 5% / 1.5 q in normal times)
- See Figure 1

The recession depresses aggregate income due to loss of labor income, only partly compensated by unemployment benefits (lasting 2 q, replacing 30 % of income)

Consumption falls as income is lower

The recession is deeper when productivity depends on aggregate demand. (We assume that the change in consumption to baseline to the power of 0.4 is mulitplied with TFP)

## 1.2 Tax cut

## 2 Old Notes

• What is the research question?

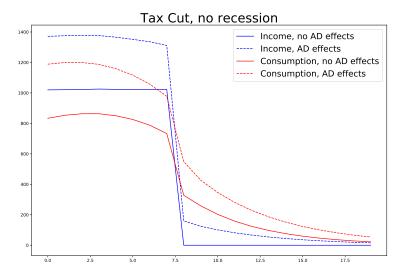


Figure 2: Tax cut

- Stimulus checks. Is there a delay much less so this time around.
- Payroll tax cut

Is this passed through to workers? Obama stimulus was 2% ONLY on the employee side

Not applicable to the unemployed.

Not applicable to retirees (we don't have lifecycle at the moment).

Not applicable to incomes over \$130,000 or there about

Is the motivation for a payroll tax cut really consumption stimulus, or is it to encourage more employment (both from worker and employer)

• Unemployment benefit extension

26 weeks is standard, Obama increased by 20 weeks

• Automatic stabilizer

Something like the Sahm rule with stimulus checks going out automatically if "the three-month moving average of the national unemployment rate (U3) rises by 0.50 percentage points or more relative to its low during the previous 12 months."

General comments

- Current focus is on duration of stimulus, rather than targeting specific household characteristics. Is that what we want? There is a argument that stimulus should be "large and fast" to get out of a recession, which could come out of a NK type framework. Do we want to make this a focus?
- Is a NK framework the correct one here? New Fed consensus statement focuses on employment shortfall, suggesting more of a one-sided model framework.
- How do we judge the appropriateness of a policy? Are we going to do welfare analysis?
- How do we handle general equilibrium, particularly at the effective lower bound?