Discussion of ”Fiscal Multipliers and Financial Crises” by Miguel Faria-e-Castro

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Overview

Contribution of the paper:

- Assessment of the state-dependent effects of various fiscal policy tools and of their contribution in mitigating the Great Recession
  - ... government spending
  - ... transfers and tax rebates
  - ... bank equity injections
  - ... credit guarantees

Methodology:

- NK-DSGE model, featuring (among others):
  - borrowing constrained households
  - leverage constrained banks
  - endogenous default of borrowers
- model solved globally with time iteration and multilinear interpolation
- series of structural shocks determined using particle filter and smoother and conditional on model fiscal data series

(Some) Results

- Transfers and equity injections have particularly large multipliers in financial crises.
- Without fiscal policy intervention the fall in aggregate consumption in the Great Recession would have been 50% larger.

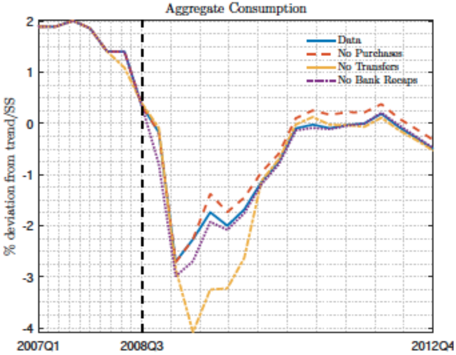


Figure 18: Counterfactual decomposition for the path of aggregate consumption.

Praise

- Highly policy relevant topic
- state-of-the art model that allows for a rich set of interactions
- state-of-the art solution and estimation methods
- large set of interesting results
- The paper very carefully explains the role of each of the novel features as well as each mechanism.

Fiscal vs monetary intervention

The Fed drastically expanded its balance sheet during the Great Recession.

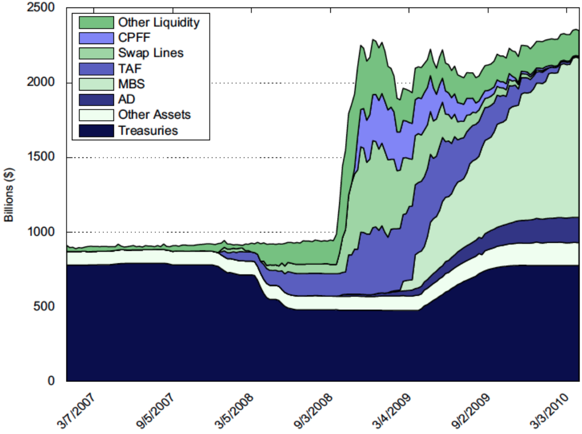
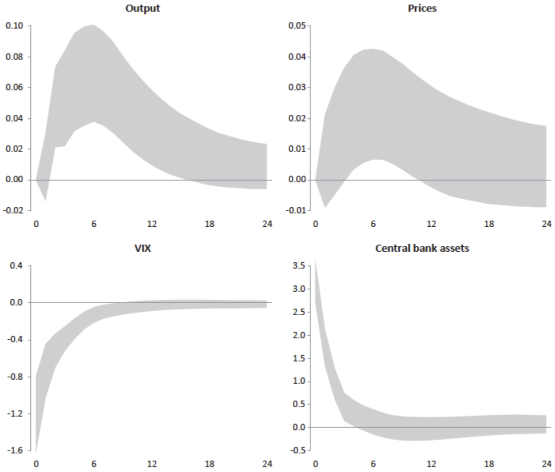


Fig. 2. Assets of the Federal Reserve. (Source: Federal Reserve Board.)

Curdia and Woodford, 2011

Effects of unconventional monetary policy I

Effects of an identified shock to the size of the central bank's balance sheet in a cross-country study (Gambacorta et al., 2014)



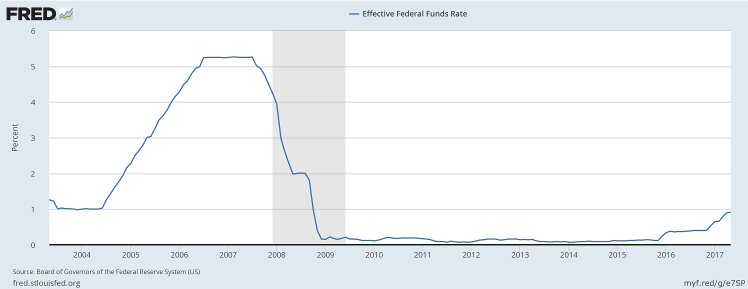
Effects of unconventional monetary policy II

- Omission of monetary policy intervention is likely to lead to overstating the effect of fiscal policy intervention in mitigating the Great Recession.

- Unconventional monetary policy could be easily incorporated in the model.
  - e.g. credit intermediation policy as in Gertler and Karadi (2011)

The Zero Lower Bound on nominal interest rates

- The FFR came down to ≈ 0 in late 2008
- Christiano et al. (2011) and Eggertson (2011) show that (some) fiscal multipliers are large when the economy is at the zero lower bound for nominal interest rates.
- Omission of the zero lower bound is likely to lead to understating the effect of fiscal policy in mitigating the Great Recession



HP-filtered consumption series

- In the paper, one of the two observables used for the estimation of structural shocks is the HP-filtered consumption series.
- The HP-trend, g_t, is a smooth series of the data that does not differ too much from the observed data, y_t.

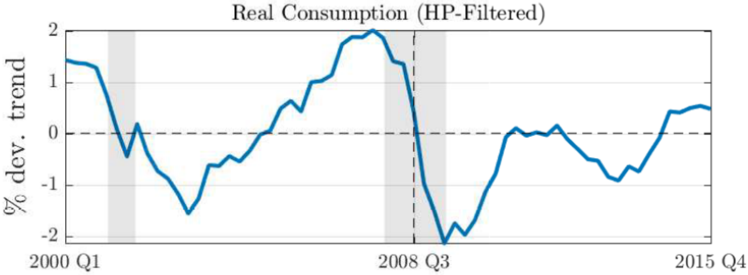
$$\min_{\{g_t\}_{t=1}^{T}} \left\{ \sum_{t=1}^{T} (y_t - g_t)^2 + \lambda \sum_{t=2}^{T-1} [(g_t - g_{t-1}) - (g_{t-1} - g_{t-2})]^2 \right\}$$

Critique of the HP filter:

- Hamilton (2017): "The HP-filter produces series with spurious dynamic relations that have no basis in the underlying data-generating process."

HP-filtered consumption series

- Krugman, 2012: The use of the HP-filter presumes that deviations from the trend are relatively short-term and excludes the possibility of a protracted slump
- For the paper, a shorter recession implies that agents in the model spend less time with binding constraints.
- The effects of fiscal intervention may have been understated.



Conclusion

- very policy relevant and insightful paper
- very clear explanations of mechanisms
- many interesting results

The effects of the fiscal policy intervention in the Great Recession may be...

- ... overstated due to omission of monetary policy intervention.
- ... understated due to omission of the zero lower bound.
- ... understated due to the relative shortness of the recession implied by the HP-filtered consumption series.

Literature

- Christiano, L., Eichenbaum, M., Rebelo, S. (2011): "When is the government spending multiplier large?" *Journal of Political Economy*, 119 (1), 78-121
- Curdia, V., Woodford, M. (2011): "The central-bank balance sheet as an instrument of monetary policy", *Journal of Monetary Economics*, 58, 54-79
- Eggertson, G. (2011): "What fiscal policy is effective at the zero interest rates?" NBER Macroeconomics Annual, 2010, Vol. 25, 59-112
- Gambacorta, L., Hofman, B., Peersman, G. (2014): "The effectiveness of unconventional monetary policy at the zero lower bound: A cross-country analysis", *Journal of Money, Credit and Banking*, 46 (4), 615-642
- Gertler, M., Karadi, P. (2011): "A model of unconventional monetary policy", *Journal of Monetary Economics*, 58, 17-34
- Hamilton, J.D. (2017): "Why you should never use the Hodrick-Prescott filter", *unpublished*
- Krugman, P (2012): Filters and full employment, https://krugman.blogs.nytimes.com/2012/07/11/filters-and-full-employment-not-wonkish-really/