Discussion of "The Aggregate Effects of Anticipated and Unanticipated U.S. Tax Policy Shocks: Theory and Empirical Evidence" by Karel Mertens and Morten O. Ravn.

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May 22, 2008

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- Third, I will present evidence that make me think that the assumption may not hold in the data.
- Fourth, I will mention which would be the consequences if those assumptions were not to hold in the data.
- Finally, I would also talk about some concern that I have about their definition of unanticipated changes.

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- Finally, the authors show that a DSGE model with distortionary taxes can account these facts, both qualitatively and quantitatively.

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- The second result (announcement effect) is more controversial.
- Blanchard and Perotti (2002) and Johnson, Parker and Souleles (2006) find little evidence of anticipation effects of tax policy changes. Romer and Romer (2007) assume no respond to announcement of a future tax liability change.

Identification Assumptions

- When estimating their empirical impulse response functions the authors run the following VAR

$$X_t = A + Bt + C(L)X_{t-1} + D(L)\tau_t^u + F(L)\tau_{t,t}^a + \sum_{i=1}^{K} G_i \tau_{t+i,t}^a + e_t$$

where τ_t^u are unanticipated tax shocks, $\tau_{t+i,t}^a$ are anticipated tax shocks known in period t and to be implemented in period $t+i$.

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- The big question is: How to find tax liabilities changes that are exogenous?

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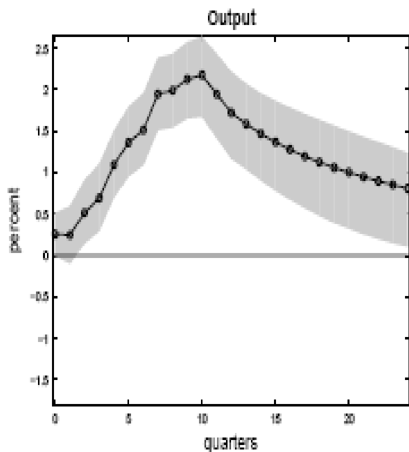
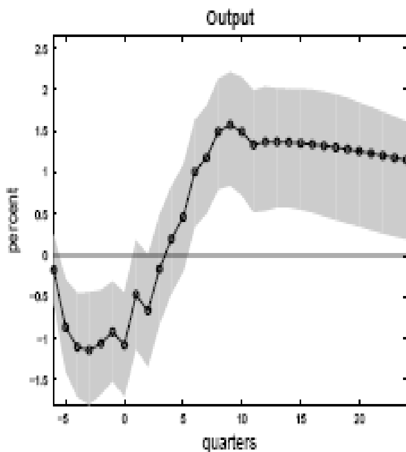
    1. "long-term growth objectives" or
    2. "deficit concerns".
- Authors big assumption: exogenous changes are orthogonal to the current realizations of other structural shocks, i.e. e_t in the VAR equation.

Unanticipated Tax Shock | Anticipated Tax Shock





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- Romer and Romer (2007) use causality tests to justify treating variables as exogenous for purposes of inference.
- When agents have fiscal foresight Leeper (1990) shows that Causality tests are misspecified.

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- Solution: Instruments.

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- Important: VAR regression assumes "exogenous" tax changes.

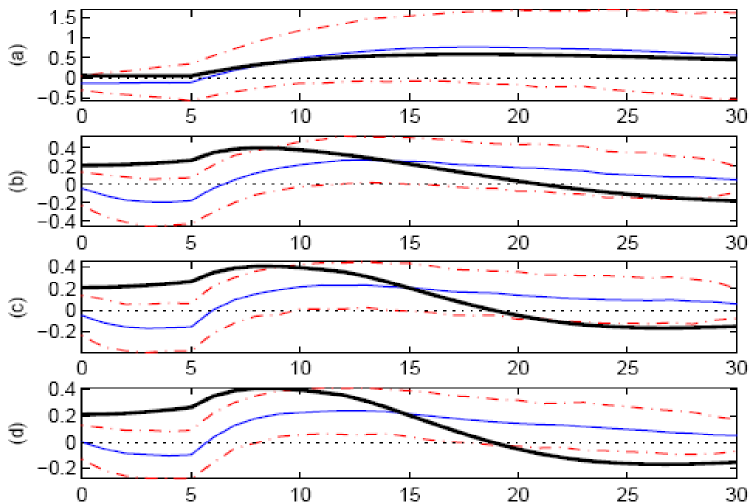

FIGURE 4. Responses of Consumption to 6-Period Foresight of Labor Taxes.

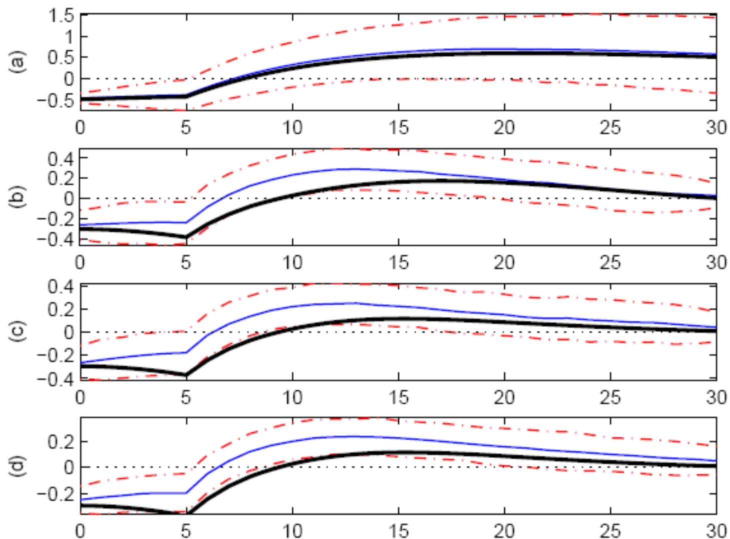

FIGURE 5. Responses of Consumption to 6-Period Foresight of Capital Taxes.

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- Why? Even when the implementation lag is below 90 days, the law may have been discuss/presented in the congress/senate/newspapers for a very long period.

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- This is the best paper in this literature: it handles the non-invertible problem.