How Financial Innovations and Accelerators drive Booms and Busts in U.S. Consumption

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Discussion

by

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DNB Conference, Amsterdam

October 25, 2012

Summary

- At issue is the extent to which the response of consumption to assets is affected by changes in credit conditions in unsecured debt markets and in the liquidity of housing wealth

- The authors construct:
  - A credit conditions index (CCI) based on reports from loan officers in banks
  - A housing liquidity index (HLI) that is an unobserved variable in an equation from mortgage refinancing

- They find that both CCI and HLI affect the response of consumption to assets

- The drop in the consumption to income ratio from 2007 on is primarily due to the debt burden in the household balance sheets and to the deterioration of the HLI index

Overall Impression

- Both the research question and the findings are very reasonable

- Specifications are well thought out

- The authors perform a number of specification tests and check the forecasting power of the equations

- They have done a lot of data work to construct the CCI index, and also construct a useful new HLI series

Marginal Propensity to Consume

- There is a long run equation of the form

$$lnc_t = \cdots + \gamma_1 \frac{A_{t-1}}{Y_t} + \gamma_2 G_t \frac{A_{t-1}}{Y_t} + \cdots$$

- Marginal propensity to consume (usual definition) is the derivative of the level of consumption with respect to the asset in question

$$\frac{\partial C_t}{\partial A_{t-1}} = \frac{\partial \exp\left(\ldots + \gamma_1 \frac{A_{t-1}}{Y_t} + \gamma_2 G_t \frac{A_{t-1}}{Y_t} + \cdots\right)}{\partial A_{t-1}}$$

$$= \exp(\ldots + \gamma_1 \frac{A_{t-1}}{Y_t} + \gamma_2 G_t \frac{A_{t-1}}{Y_t} + \cdots) \frac{\gamma_1 + \gamma_2 G_t}{Y_t}$$

- Instead, the authors refer to the γ's as the m.p.c's, but they are rather the response of logC to the asset to income ratio, i.e., a semi-elasticity

- Comparability with large part of the literature is consequently lost

- Show MPCs (conventionally defined) out of various assets by year:
    - Without HLI and CCI
    - With HLI and CCI

HLI equal to the MPC out of housing wealth?

- Result of the state-space model (p.15)
- But m.p.c’s and HLI are different concepts
- HLI becomes negative (Fig.5) with not a really convincing explanation
- Authors may want to check whether HLI corresponds to the derivative of the **level of consumption** with respect to the **level of housing wealth**

What is behind the HLI index?

- Unobservable component, estimated using Kalman filter
- Important in determining consumption response to wealth
- Rises strongly from the early 90s to 2006
- Economic interpretation desirable

One factor behind HLI: the role of regulators

The demise of the Office of Thrift Supervision

Other factors possibly affecting HLI

- Capital inflows from abroad that financed MBSs
- Relaxing of the standards of credit rating agencies
- Fannie May and Freddie insuring/buying worse quality mortgages
- Invention of new financial products related to home debt (credit-default swaps were created in 1994)

CCI

- Should be interacted with liquid financial assets, just as HLI is interacted with housing wealth

- Interacted with unemployment?

- If interacted, its effect is the total derivative of the level of consumption with respect to it, not just the partial derivative of the CCI term alone

Further Issues

- Would be very useful to include home equity loans in the equation involving HLI
    - Greenspan and Kennedy estimate home equity loans to be about half of cash-out refinancing
    - Home equity debt outstanding exists in the flow of funds
    - They are practically zero before 1994

- CCI (and HLI?) are generated regressors, thus standard errors should be adjusted for this

- Authors define illiquid assets to include everything other than housing, deposits and credit instruments, i.e., shares, mutual funds, pension and life insurance reserves, durables and equity in unincorporated business
    - Very heterogeneous, probably shares and mutual funds should be put separately

- Housing services excluded because wealth effect is more plausible without them
    - What happens with other components of housing sector (property taxes, depreciation)?
    - If housing services excluded, then total disposable income not appropriate concept

- Arguably, HLI should be interacted with net housing wealth, not gross, as loans are given taking into account debts on the property
  - Comparability with literature is compromised
  - Could be a robustness check

- Nice if good forecast post 2007 could be done out-of-sample