# Discussion on "Credit Cards and Consumption" By Scott Fulford and Scott Schuh

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## Paper's contributions

- A very ambitious paper but executed nicely
  - Try to explain various empirical facts, such as credit utilization rates, debt, consumption, and bankruptcy, over the business cycle, the lifecycle and for individuals, by using a dynamic structural model with heterogeneous individuals
  - Payment data (Boston Fed's payment diary) reveals two types of credit card users: convenience users (use credit cards as charge cards) vs. revolvers, which are the main source of heterogeneity

# Paper's contributions

- Heterogeneous individuals

| Patient | Impatient |
|---|---|
| convenience user | revolver |
| not accumulate CC debt | accumulate CC debt |
| high risk aversion | low risk aversion |
| low discount rate | high discount rate |
| no bankrupt | involuntary/voluntary bankrupt |
| Low interest rate (for saving) | Higher interest rate (for borrowing, especially defaulted borrowers) |
| low marginal propensity to consume | high marginal propensity to consume |
| high initial wealth/income | low initial wealth/income, not very poor |
| low fraction of late-life income from SS, pensions, housing (due to high saving rate) | higher fraction of late-life income from SS, pensions, housing |

## 3 factors unique to the U.S.

- When thinking about U.S. household finance behavior, understanding 3 unique factors may be useful
  1. Using credit cards is a very popular way to access liquidity
  2. Some young individuals enter the economy with significant amount of student loan debt
  3. Out-of-pocket medical expenditure is a significant expenditure shock (due to limited insurance coverage) and also an income shock

# Comment 1: Heterogeneity among revolvers

- There may be at least two types of revolvers
  - One type is “hand-to-mouth” due to their preferences (high discount rates and low risk aversion) and is not very poor (described in the previous slide)
  - The other type may be moderate-income earners (income is close to the minimum cost of living), not using alternative services (payday loans, overdrafts, auto title loans) but using credit cards to meet liquidity needs
  - The second type’s credit card use and debt accumulation may be different from the first type; the second type’s discount rate may be lower than interest rate of credit cards, but they have no better alternative?
  - Distinguishing the two types may not affect macro-level policy, but may affect micro-level policy, such as financial education/inclusion

## Comment 2: Credit card purchase/consumption value

- $40 billion of aggregated value of using credit cards (credit card payments by consumers are $2 trillion): Convenience users' benefits are greater than revolvers' benefits (0.32% vs. 0.24% of consumption), but why?
  - Liquidity may be the main benefits for revolvers but what are main benefits for convenience users? Rewards (welfare transfers) are part of convenience users' benefits?
  - The difference in credit card transaction amount between convenience users vs. revolvers seems to be small. Card NWs have detailed data.
    - A card network's data suggest non-reward credit cardholders are more likely to revolve balance, but average monthly balance (among cards with balance) is higher for reward cards; average number of monthly transactions with reward cards is much higher than that with non-reward cards; average transaction size of non-reward cards is greater than that of reward cards; average monthly expenditure with reward cards is greater

## Comment 3: Revolver's debt share decline in their late life

- Gaining better ideas about risks and precautionary saving/motive may explain the debt share decline
  - As impatient individuals get older (over 50 years old), they gain better ideas about their risks, such as risk of living longer than expected and risk of living under worse medical condition than expected
  - Their risk aversion and discount rate may be adjusted accordingly
  - It may be unlikely they adjust risk aversion and discount rate for bequest purpose, unless bequest is a compensation for informal (family) caregivers
  - Can the model add the end of life uncertainty? More frequent medical expenditure shocks in the late life?