Effet de richesse et transmission de la politique monétaire dans la zone euro

Séminaire Fourgeaud

Albane Sauveplane
Conceptual framework

Permanent income hypothesis (Friedman, 1957): individual consumption is determined by lifetime resources, unlike Keynesian consumption functions.

Life-cycle theory of consumption (Modigliani and Brumberg, 1954): consumption depends on lifetime wealth and current income; saving is used to achieve smooth consumption.

Refinements to the forward-looking model: precautionary savings, psychology of instant gratification, liquidity constraints.
Literature:

Wealth and income effects on consumption.

Heterogeneity of households: with respect to countries, demographics, composition of the household, education...

Exploration of liquidity constraint, precautionary savings and bequest motives.

Policy implications of MPC heterogeneity:

• Fiscal policy: variations in household responses to tax reforms and other redistributive policies
• Monetary policy: transmission channels when households hold assets with different degrees of liquidity (distributional effects)
• Inequality: effects of heterogeneous consumption changes in response to shocks on income and wealth inequalities
Two papers

(1) Garbinti, Lamarche, Lecanu and Savignac
"Wealth effect on consumption during the sovereign debt crisis"

- Empirical analysis of MPC
  - Instrumental variable approach
- Effect of wealth shocks
- Cross-country comparison (BE, DE, IT, CY, ES + France)
- Heterogeneity depending on net wealth level, composition (housing vs. financial wealth) and consumption item
- Application: effect of exogenous asset shocks on wealth and consumption inequalities

(2) Ampudia, Cooper, Le Blanc and Zhu
"MPC Heterogeneity in Europe"

- MPC computed from simulated data
- Effect of transitory income and stock return shocks on MPC
- Cross-country comparison (DE, FR, IT, ES)
- Heterogeneity across income and education levels
  - Non-linear effects
  - Hand-to-mouth households
- Application: transmission of monetary policy to consumption
Data: unique panel dataset combining wealth, income and consumption surveys

Some interesting insights:

Negative mean change in consumption in DE over the period 2010-2014

Lowest percentage of debt in total assets for Italy in the first net wealth decile

460% in Belgium, 200% in Cyprus, 447% in Germany and 129% in Spain

(1) Garbinti, Lamarche, Lecanu and Savignac

"Wealth effect on consumption during the sovereign debt crisis"
Empirical approach: Reduced form based on the life-cycle model

Instrumented panel regression using counterfactual change in wealth (pure effect of asset price developments)

Results:
- Significant wealth effect on consumption at the mean (from 1 to 5%)
- Cross-country heterogeneity
- Decreasing MPC across the net wealth distribution

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Housing wealth</th>
<th>Financial wealth</th>
<th>D1-D5</th>
<th>D9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>0.017</td>
<td>0.025</td>
<td></td>
<td>0.065</td>
<td>0.015</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0.004</td>
<td>0.011</td>
<td>0.032</td>
<td>0.035</td>
<td>0.004</td>
</tr>
<tr>
<td>Germany</td>
<td>0.008</td>
<td>0.016</td>
<td>0.010</td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>0.012</td>
<td>0.015</td>
<td>0.026</td>
<td>0.057</td>
<td>0.011</td>
</tr>
<tr>
<td>Italy</td>
<td>0.047</td>
<td>0.044</td>
<td>0.164</td>
<td>0.064</td>
<td>0.024</td>
</tr>
</tbody>
</table>
(1) Garbinti, Lamarche, Lecanu and Savignac
"Wealth effect on consumption during the sovereign debt crisis"

Discussion

- Results:
  - Financial wealth channel in Italy
  - Heterogeneity across net wealth distribution

- Possible extensions:
  - Disaggregation of wealth effects?
  - Identification of other sources of heterogeneity?
  - Income shocks?
Model: Households maximize expected lifetime utility choosing consumption, bond holdings and stock holdings.

- Shocks to income and risky financial assets.
- **Sources of heterogeneity** between households:
  - Financial frictions (participation and re-balancing costs), consumption floor and bequest motive.
  - The discount factor depends on education level (low/high)
Solution and estimation:

• Estimate income profile (by age and education) from microdata and stocks returns by country.
• Estimate parameters of household optimization problem via simulated method of moments (moments to be matched are participation rate, stock share, wealth-to-income ratio).

Results:

• Significant income effect on consumption (from 10 to 45%)
• MPC out of income falls with the level of permanent income and education
• MPC out of stock returns falls with income, W/I ratio and education
• Non-linearities
Discussion

Model:
- Income profiles around age 60
- Stock returns and home bias

Results:
- Income thresholds
- Response to monetary policy

Possible extensions:
- Asymmetries?
- Permanent income shocks?

(2) Ampudia, Cooper, Le Blanc and Zhu
“MPC Heterogeneity in Europe”
Thank you for your attention!

Pour plus d’information:
www.tresor.economie.gouv.fr