Reading notes 3

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Consumption has always been an important research topic in the field of microeconomics. However, when it comes to inter-temporal consumption decisions, it is debatable whether people's consumption preferences in different periods are independent. Previous research has already revealed discrepancies between time-separable models and empirical results in many realms. But due to data unavailability, research on this issue in the consumption domain of microeconomics is lacking. This paper uses Spanish panel data in which households are observed for up to eight consecutive quarters to control for time-invariant unobserved heterogeneity. The result confirms the significance of accounting for fixed effects when researching consumption decisions and habit formation exits in the demand system.

This paper uses the model proposed by Meghir and Weber (1996) and limits the study to three non-durable goods: food at home, transport and service. Then the author proposes a lifetime utility maximization model, and the difference between both representations of the first-order conditions can be used to distinguish between liquidity constraints and inter-temporal dependence in preferences. The unobserved heterogeneity is made up with expectational errors and the existence of preference shocks. After controlling for the fixed effects, the author plans to conduct estimation by using the Generalised Method of Moments, GMM, and the models consist of two equations, which respectively are food versus services and transport versus services.

Regarding the data, the author uses data from the ECPF (Continuous Family Expenditure Survey) in Spain. The ECPF office interviews about 3,200 households every quarter and rotates at 12.5% each quarter, and the author thus obtained data of household consumption for eight consecutive quarters. This panel data guarantees the author can control for fixed effects so that he can reveal the connection of consumption preferences in different periods.

The estimation results support the author’s initial assumption. If fixed effect is not included, the consumption preferences are inter-temporally separable, and the Sargan test result shows that the validity of instruments is weak. After including fixed effect, the results of MRS shows the existence of habit formation for food and service consumption, and the Sargan test does not detect significant correlations between the instruments and error terms. Besides, by using inter-temporal Euler conditions, the author also shows evidence of dynamics for food and he can not reject the equivalence of two sets of coefficients. Then the author tests the households whose head is younger than 40, which appears more likely to be constrained. The Euler equations imply non-separabilities but reject the equality of coefficients, which confirms the fact of liquidity constraints. Finally, the paper calculates the inter-temporal elasticity of substitution, and the results show IES measures contain important sources of heterogeneity. Data on food and transport has a degree of IES unaligned with recent empirical time series.

In conclusion, this paper addresses the importance of accounting for time-invariant unobserved heterogeneity when analyzing consumption. Furthermore, after controlling the fixed effect, the paper shows the existence of habit formation. This paper contributes to explain the differences

between theoretical models and empirical evidence and can be helpful for future research in the field of consumption research.