

## **Research statement of selected past research and research plans:**

### **Research in progress/planning:**

#### **ESRC-funded project on “The Demand for Durables in the Second Half of Life”**

joint with Martin Browning, Nuffield College and Tom Crossley, University of Cambridge

The objective of this project is to better understand why the demand for durables experiences a temporary increase around retirement and a substantial decline at older ages. These empirical observations shall be investigated closely using three separate UK datasets. Furthermore, the aim is to provide a theoretical underpinning of the consumer behaviour of the elderly with respect to durable goods and to empirically test the derived hypotheses. The key questions investigated are: Do households postpone durables purchases before retirement and use lump-sum payments received upon retirement to replace and renew their household appliances and consumer electronics? Do complementarities between durables and leisure affect purchase behaviour around retirement? How can we explain the large drop in durables expenditures at older ages? Do households rationally take into account their life expectancy when making durables replacement decisions?

The project should result in at least three publications and will extend beyond the scope of the granted ESRC project period which runs from January 2008 until December 2008. First, an empirical investigation of the age-specific trends in the expenditures on durables in terms of replacement frequency and quality using three datasets – the Expenditure and Food Survey, the British Household Panel Study and the English Longitudinal Study of Ageing – shall be conducted.

In the second paper, we analyse the replacement behaviour of individuals beyond the age of 50. Replacement behaviour will be modelled taking into account the specificities of durables (e.g. lumpiness and durability) and the living circumstances of this age group (e.g. changes in household composition, potential downsizing in housing, life expectancy).

The third part of the project concentrates on consumer behaviour at and shortly after the time of retirement entry. Demand is shaped by complementarities between durables and leisure, changes in the income source and potentially the income level due to the switch from earned to pension income, and altered borrowing and/or liquidity constraints due to lump-sum payments received from pension funds in this period. The impact of expenditures on durables has been ignored by the recent wave of studies trying to explain the abrupt drop in consumption at retirement – the so-called retirement consumption puzzle. The third paper aims to fill this gap.

#### **Analysis of Care-giver Burden among Older Mexican Couples (and their children)**

joint with Jürgen Maurer, Universität Mannheim

In many countries, policies geared at saving on the cost of long-term care give incentives for care provision by the family. However, medical and psychological studies have shown negative health impacts for professional care-givers, while the impact of care-giving on partners and children who have less medical training is less known. Therefore, we investigate the cognitive and health impacts of care-giving on the partners and children of elderly people in need of such care in this paper. The data we base our study on is the Mexican Health and Aging Study (MHAS) which records financial as well as time transfers between the family members and also includes detailed information on health status and health shocks experienced by the sample population above the age of 50.

#### **Consumer welfare in transition countries – the Impact of Supermarket Expansion (early planning stage)**

joint with Heike Harmgart, EBRD

This project aims at evaluating the impact of the expansion of supermarkets in transition countries on consumer welfare. In particular, we are interested in the question whether poorer households have benefited from the growing market in three dimensions: accessibility of supermarkets, product variety and prices of goods. The project is in an early planning stage.

### **Current and past research:**

#### **Effects of Population Ageing on Aggregated UK Consumer Demand (JOB MARKET PAPER)**

This paper analyses the mechanisms through which population ageing affects aggregate consumer demand in the UK. As household-level composition of consumed goods and services varies over the life cycle due to changes in tastes, incomes and household composition, the aggregate demand structure is likely to change as well in reaction to a shift in the population age structure. Using a quadratic almost ideal demand system model, I estimate microeconomic age-specific household demands. Then, I aggregate over households avoiding the aggregation bias inherent in most analyses based on macroeconomic data. Finally, I present four scenarios which illustrate the influence of changes in the population age structure, household composition patterns and the level and intergenerational distribution of spending power on aggregate consumer demand. The results point to a moderate impact of a shift in the population age structure alone due to the low spending power of those above age 60 in relation to the younger population. However, substantial effects are found in combination with income (respectively expenditure) redistribution towards the older age groups in the UK. In this case, aggregate demand shifts towards higher expenditure shares of health-related goods as well as to household and leisure services and leisure goods.

[http://www.econ.ucl.ac.uk/job\\_market/luehrmann/paper1.pdf](http://www.econ.ucl.ac.uk/job_market/luehrmann/paper1.pdf)

#### **Who wears the trousers? A semiparametric analysis of decision power in couples**

joint with Jürgen Maurer (MEA, Universität Mannheim)

Intra-household decision processes depend on the balance of power between the partners. However, little is known about its determinants. We propose a unique measure of power using self-assessments of partners' say that are consistent with the definition of power in the collective model. We model balance of power in a semiparametric double index framework that features separate indices for each spouse. These aggregate partners' characteristics and allow for nonparametric interactions between them. Using the Mexican Health and Aging Study, we identify education and employment as main drivers of decision power, especially for women. While a higher education level increases the male partner's decision power only moderately, the increase in the female partner's decision power is large if she features relatively high educational attainment.

Other determinants are health, income and the urbanity of the area. Moreover, the models feature some interesting gender asymmetries and non-monotonicities, which would have been hard to capture in a fully parametric modelling framework.

<http://cemmap.ifs.org.uk/wps/cwp2507.pdf>

#### **Consumer Expenditures and Home Production at Retirement - New Evidence from Germany**

This paper investigates consumer expenditures of German households pre- and post-retirement. The widely observed distinct drop in spending upon retirement entry poses an empirical puzzle since life cycle theory predicts smoothing of the marginal utility of consumption over time. As one explanation, I explore the role of home production as a substitute for consumer expenses. Taking a combined look at consumer expenditures and time use pre and post-retirement, I find a significant drop of about 17% of pre-retirement expenses at retirement which coincides with an increase in time spent on home production of an additional 33% per day. These results provide empirical evidence that home production can partially account for the observed drop in consumer expenditures. Hence, the results are consistent with an extended life cycle model in which utility is derived from consumption and leisure and in which households can enjoy consumption from market-purchased and self-produced goods and services.

<http://www.sfb504.uni-mannheim.de/publications/dp07-13.pdf>

This is a summary of my recent research. More information on my past research papers is contained in the publications section of my CV.