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**HAS HOUSEHOLD INDEBTEDNESS HAMPERED CONSUMPTION  
DURING THE RECESSION? EVIDENCE FROM MICRO DATA****Abstract:**

This paper investigates the impact of household debt on the consumption during the last recession. The total financial debt has been raising markedly during the past three decades in advanced economies and the discussion about economic implications of household debt has received high attention recently. Although several theoretical studies rely on the amplification effect of household debt when explaining the recent macroeconomic developments, there are only very few studies utilising micro data to confirm the underlying assumptions. Considering the increasing usage of household debt in macroeconomic models, there is a strong need for microeconomic evidence on the behaviour of indebted households. The current paper contributes to filling the gap.

This paper examines the implications of indebtedness in Estonia, a country which experienced the most vigorous increase in household debt burden among European countries during 2000-2007. The paper uses a database of a commercial bank that entails detailed information about financial liabilities and assets of individuals in a quarterly interval. The database is unique as it includes frequent financial information of ca 100,000 individuals for 7 years, 2005-2011 and enables to compare the consumption pattern of individuals in different periods of the business cycle.

The paper estimates a conventional consumption model in which the debt variable is incorporated. The indebtedness is measured by two variables, by debt-to-yearly income ratio and by yearly debt service ratio. Household indebtedness, either measured as debt-to-income ratio or debt service ratio, show significant negative impact on their consumption change over the whole period of 2006-2011. However, debt-to-income ratio expresses slightly decreasing negative impact over the business cycle, the negative effect during the recession is no stronger than during the pre-crises period.

On the other hand, the debt service ratio induces different consumption response during different business cycle period. There is significant negative impact of debt service ratio on consumption during the recession period, i.e. in 2008-2009. Before and after the recession the negative impact is weaker. Hence amplifying effect of debt service ratio is detected for the recession.

The upshot of the results is that it is not debt-to-income ratio but debt service ratio that captures the amplification effect of indebtedness on consumption during the recession. In the literature the importance of the measure of debt-to-asset ratio is emphasized. The results of the paper suggest that debt service ratio contains interesting information about the link between indebtedness and consumption.

**Keywords:**

household indebtedness, debt repayment burden, debt-to-income ratio, amplification effect, recession

**JEL Classification:** E21, D14, E32