The Response of Consumption Expenditure to Anticipated Income Shocks: Evidence from the Financial Diaries

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Motivation

Question: How do households react to a predictable change in their disposable income?

- Useful for fiscal policy: a tax cut during recessions, assuming that households will use the resulting increases in disposable income to raise expenditures. Hence, reducing the severity of recessions

- Important to understand the propagation of business cycles to the economy

- Inform about the extent of markets completeness: available instruments to cope with shocks

Theoretical background

The starting point of the modern consumption theory is the Life Cycle/ Permanent-Income Hypothesis (LCPIH)

- Rational consumers will not follow a simple Keynesian consumption function, such as consuming a constant fraction of their current income each period

- Consumers will rather make decisions within an intertemporal optimization framework, that is they will save and borrow to optimally redistribute the stream of their income over the life cycle in order to maximize their lifetime utility

The workhorse of the LCPIH is the Euler equation, that is:

$$U_{c,t} = E_t[U_{c,t+1} \beta R^i_{t+1}] \qquad i = 1, ..., m$$

• It dictates how lifetime wealth should be allocated overtime, that is

  • household should smooth marginal utility of consumption

• Assume utility is separable over time: rule out habit formation and durable commodities

• It gives a prediction on the consumption growth

Empirical overview

Idea: In presence of liquidity constraints households react to predictable changes in income

- Recent literature uses identifiable income shocks (on the US data)

- Johnson, Parker, Souleles (2006) use the 2001 tax rebates (see also Agarwal, Liu, Souleles (2007))

- Stephens (2003) uses social security payments

- Coulibali and Li (2006) use final mortgage payment

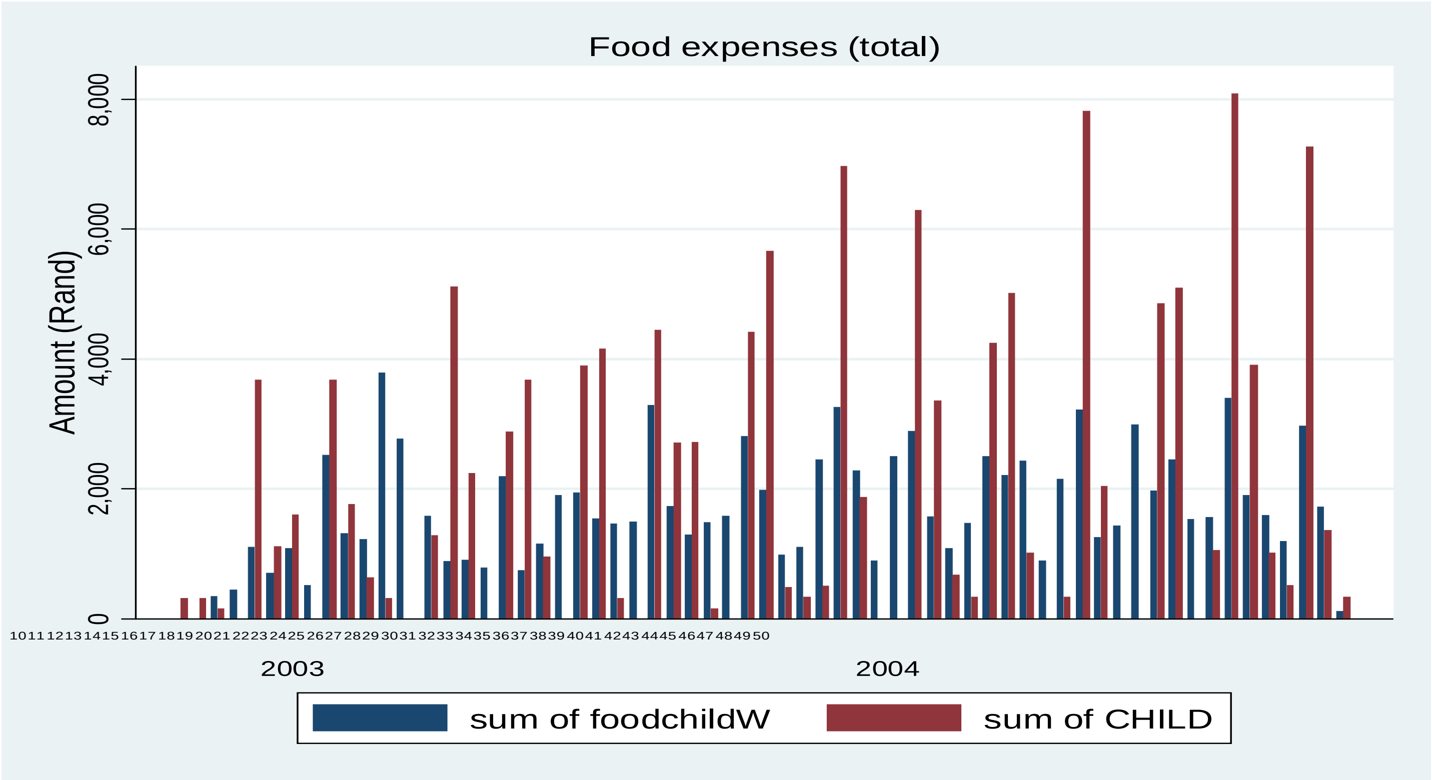
- They all reject the LCPIH

Financial Diaries

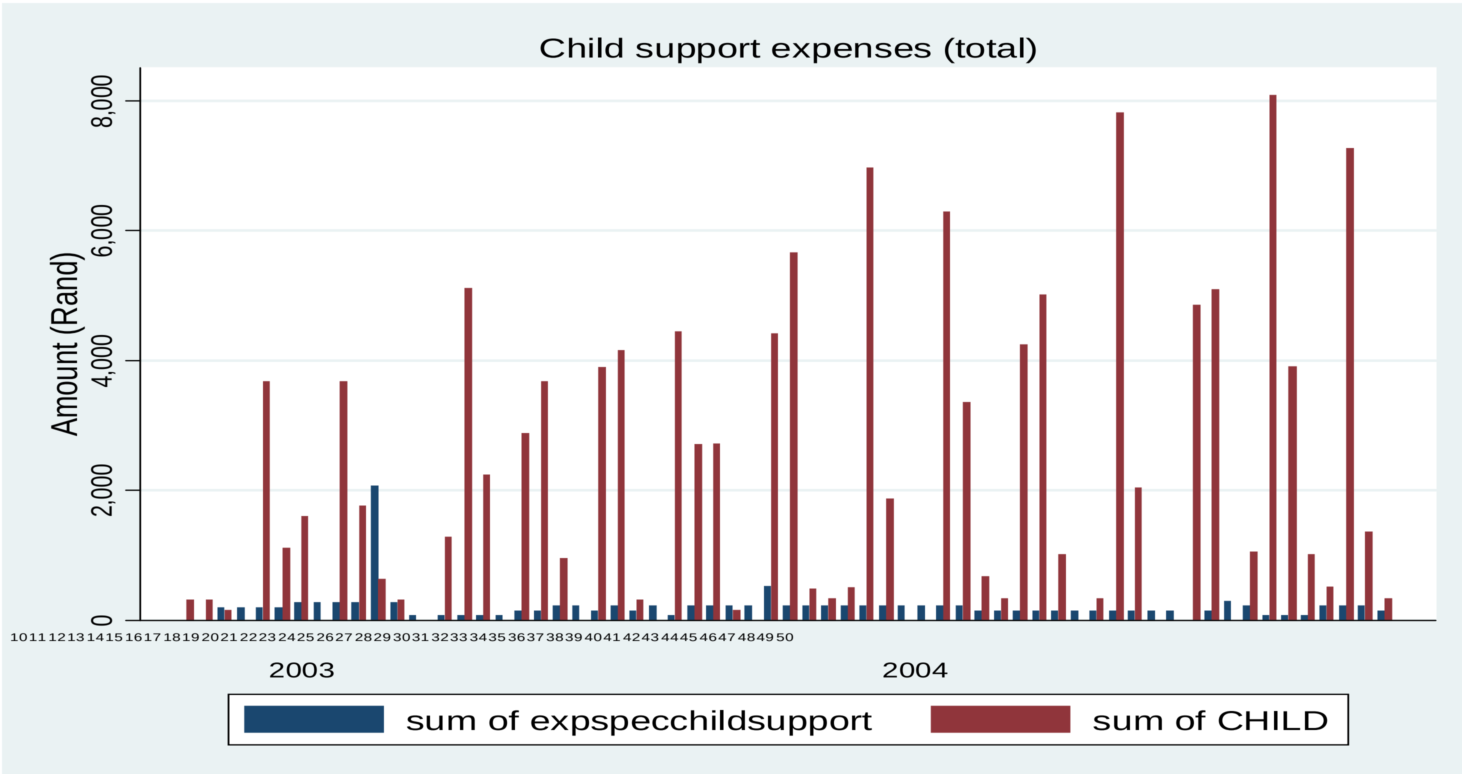
- **Advantage:** include both income and expenditures data

- 166 households, poor households drawn from three different areas of South Africa (Langa, Lugangeni and Diepsloot)

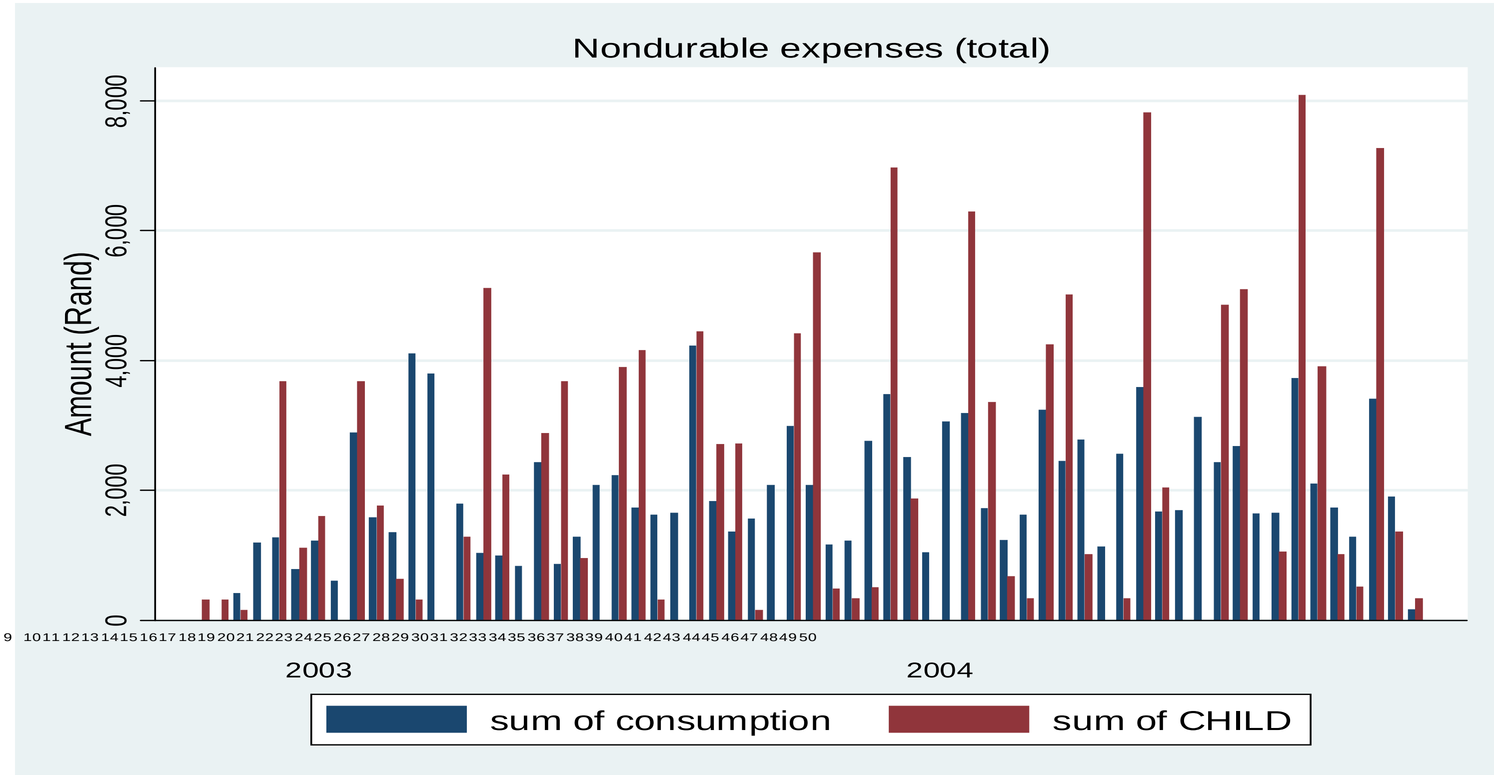
- Grant recipients (Old grant, Child support grant, Foster grant, Disability grant)



Food expenses (total)
Amount (Rand)
0
2,000
4,000
6,000
8,000
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
2003
2004
sum of foodchildW
sum of CHILD



Child support expenses (total)
Amount (Rand)
0
2,000
4,000
6,000
8,000
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
2003
2004
sum of expspecchildsupport
sum of CHILD


Nondurable expenses (total)
Amount (Rand)
0
2,000
4,000
6,000
8,000
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
2003
2004
sum of consumption
sum of CHILD

Conclusion

- Food expenditures seem to match child grant payment
- Descriptive evidence of liquidity constraints