

**Bart Hobijn**

Discussion of

**Inflation at the  
Household Level**

Greg Kaplan and Sam Schulhofer-Wohl

# Stylized facts rediscovered using KNCP

## Price level differences

- **Outlet bias:** Households buy at different outlets  
Faber and Fally (2017)
- **Regional price differences are substantial**  
Moretti (2013)

## Inflation rates

- **Regional variation and Phillips curves**  
Hurst, Beraja, Fuster, Vavra (2016)
- **Household level inflation rates**

# Outlet bias only focuses on price!



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# Confirm and extend set of facts

- **Very large variation in household level inflation rates.**
- **Variation mainly due to inflation differences within expenditure categories (strata)**
- **Distribution of inflation rates moves in lockstep with overall inflation**
- **Little persistence in household level inflation rates**
- **Substantial substitution across strata**
- **Poor have 1 percent higher inflation**

Hobijn Lagakos (2005)

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# Four relevant spending categories

	$t$		$t+4$
I		Spending on same UPC	
II		New goods / cross-UPC substitution	
III		Infrequent purchases (durable goods)	
IV		Not included	

# Four relevant spending categories

	$t$		$t+4$
I		Spending on same UPC	
II		New outlet	
III		Slight difference from CPI In CPI item is defined as an outlet-ELI combination	
IV		Not included	

# Four relevant spending categories

Present fraction of spending that is matched over 4 quarters. Does it depend on demographics or income?

I



the UPC

$t+4$



II



New goods / cross-UPC substitution



III



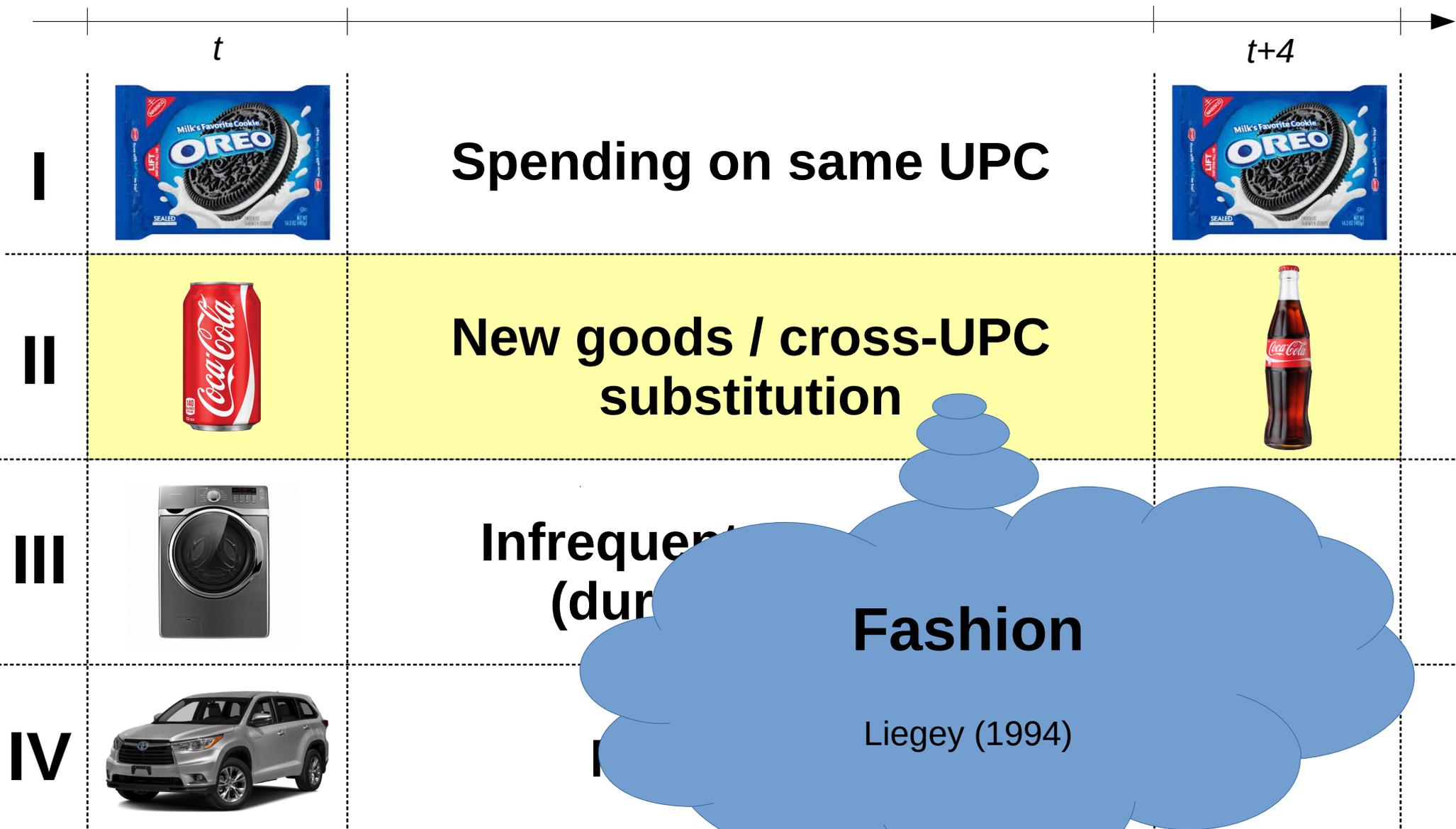
Infrequent purchases (durable goods)

IV

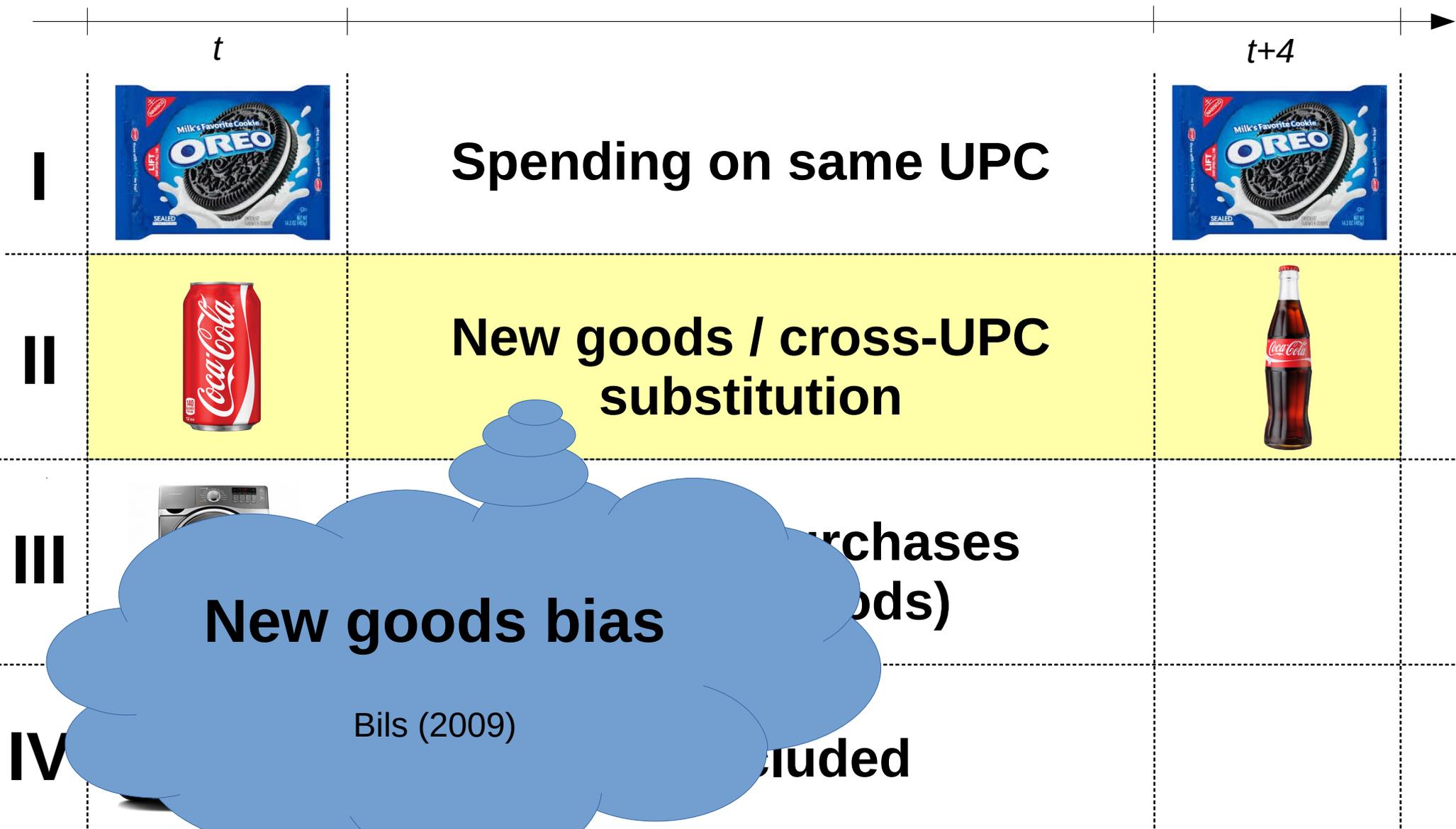


Not included

# Four relevant spending categories



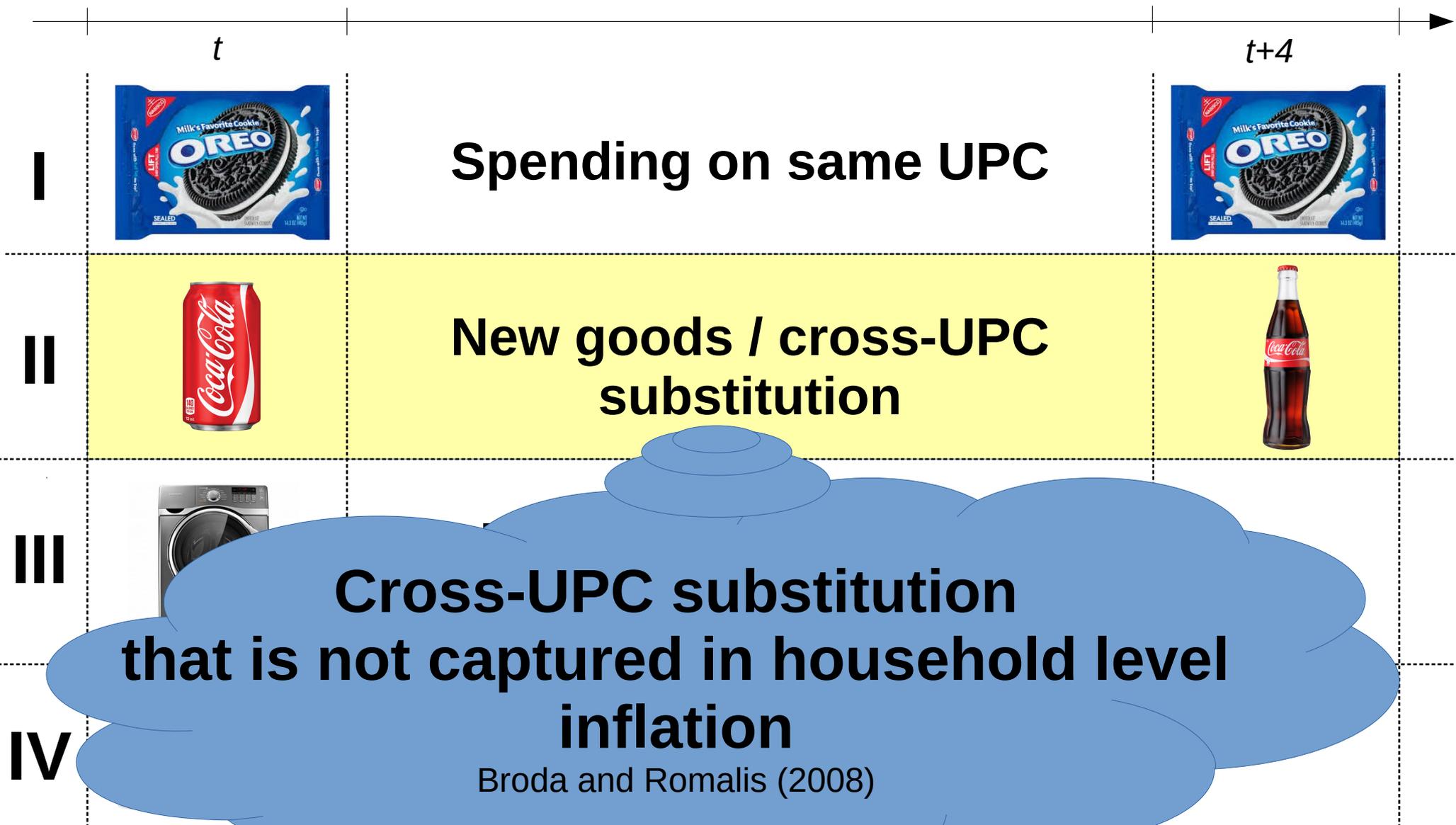
# Four relevant spending categories



**New goods bias**

Bils (2009)

# Four relevant spending categories



# Four relevant spending categories

**Price index theory really not applicable to intertemporal optimization problem**

Bils and Klenow (2001), Reis (2010)

I

II

III

IV



**New goods**  
**Price index**  
**UPC**  
**Scarcity**

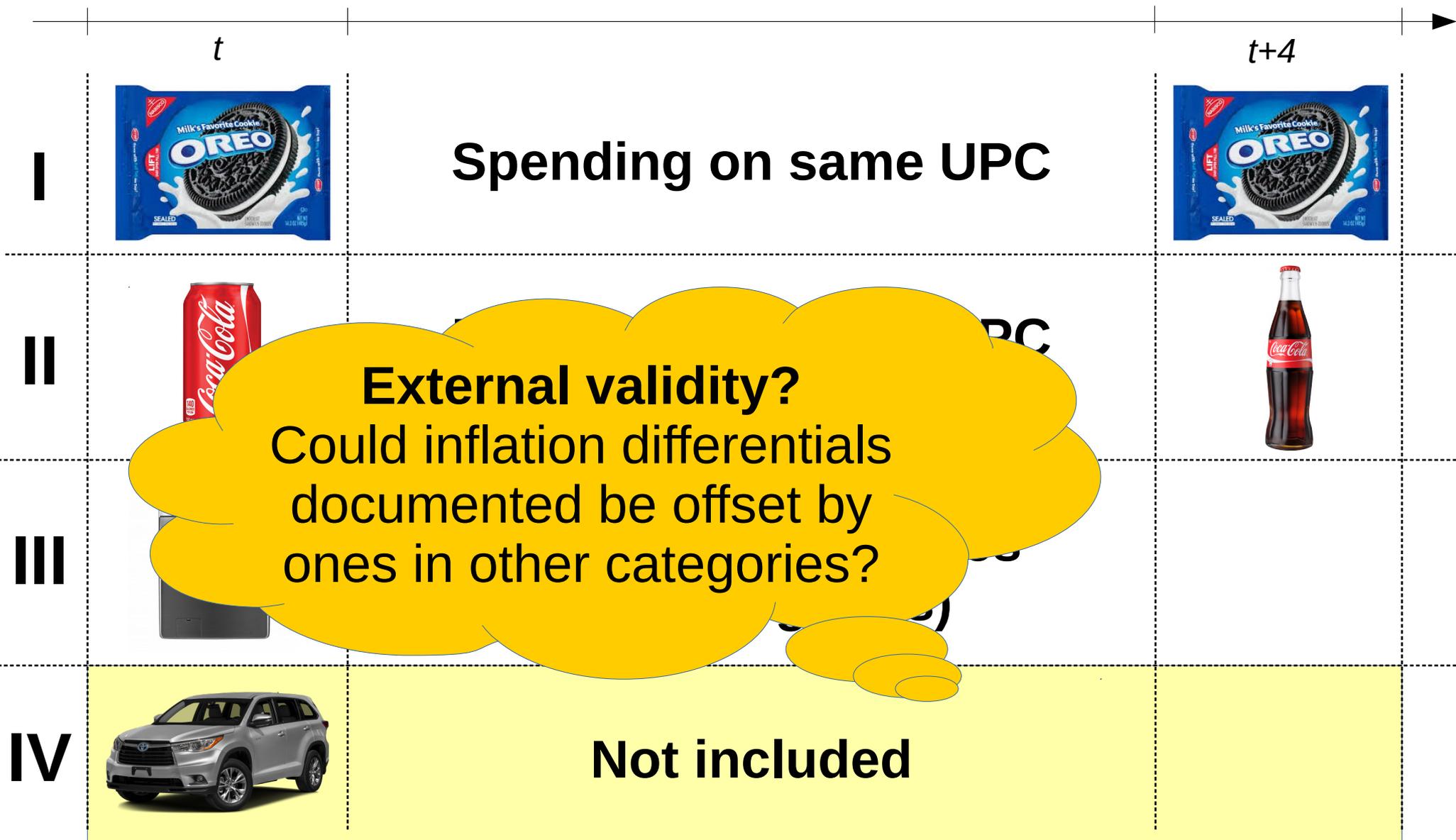


**Infrequent purchases**  
**(durable goods)**



**Not included**

# Four relevant spending categories



# Policy implications...

## Monetary policy

- *Aggregate index of inflation representative of broad changes in price level*
  - Cross sectional distribution of prices moves in lockstep with published inflation measure.

## Other policies

- *Demographics and income-dependent indexation of benefits and tax brackets*
  - Persistent differences across groups suggest different COLAs.
  - However, not much persistence at the individual household level.