

# Unpaid Non-market Productive Activities by Age and Sex: Measurement and valuation for the United States

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# Outline

- ▶ Data and methods
- ▶ Time production and consumption
- ▶ Time valuation
- ▶ Results
- ▶ Conclusions

- ▶ Data and Methods

# Salient characteristics of the ATUS

- ▶ Survey characteristics:
  - ▶ Sampling frame: CPS (60,000 occupied households every month)→ demographic information;
  - ▶ Universe: noninstitutional population ages 15 and older;
  - ▶ Non-response rate: 58%

Source: ATUS (2009).

## Major activity categories in the ATUS coding lexicon

	Activity (ATUS)	Classification (Phananiramai, 2008) (?)
1	Personal care (mostly sleep)	own
2	<b>Household activities</b>	free/ <b>committed</b>
3	<b>Caring for and helping household members</b>	<b>committed</b>
4	<b>Caring for and helping nonhousehold members</b>	<b>committed</b> /contracted
5	Work and work related activities	contracted
6	Education	education
7	<b>Consumer services</b>	<b>committed</b> /contracted*
8	<b>Professional and personal care services</b>	<b>committed</b> /contracted
9	<b>Household services</b>	<b>committed</b>
10	<b>Government services and civic obligations</b>	<b>committed</b> /contracted*
11	Eating and drinking	free
12	Socializing, Relaxing, And leisure	free
13	Sports, Exercise, And recreation	free
14	Religious and spiritual activities	free
15	<b>Volunteer activities</b>	<b>committed</b>
16	<b>Telephone calls</b>	free/contracted/ <b>committed</b> *
17	<b>Traveling</b>	free/contracted/ <b>committed</b>

Source: (Krantz-Kent, 2009) and (Phananiramai, 2008).

# Unpaid household work classification

- ▶ Margaret Reid (1934): Non-market output third party criterion:  
“is the output in question something that a person could have hired someone else to produce for him?”
- ▶ Four main activity categories of unpaid hh work:
  1. Household activities;
  2. Caring for and helping household members;
  3. Purchasing goods and services;
  4. Travel related to unpaid household work.

## Average hours per week spent doing unpaid hh work, 2003-2007 and 2009

Type of work	2003-2007 (Krantz-Kent 2009)			2009 (own)		
	total	men	women	total	men	women
<b>Unpaid household work (total)</b>	<b>21.5</b>	<b>15.9</b>	<b>26.7</b>	<b>19.3</b>	<b>14.3</b>	<b>24.0</b>
1. Household activities	12.4	9.2	15.5	11.9	8.8	14.9
Cleaning	2.6	1.2	4.0	2.8	1.3	4.1
Laundry and sewing	1.5	0.4	2.5	1.3	0.4	2.1
Other housework				0.1	0.1	0.2
Food and drink preparation	3.6	1.9	5.3	3.8	2.0	5.4
Maintenance and repair	1.5	2.4	0.8	1.3	1.9	0.8
Lawn and garden care	1.4	1.9	0.9	1.4	1.9	0.9
Pet care				0.3	0.3	0.4
Household management	1.0	0.8	1.1	0.9	0.8	1.1
Household activities, N.e.c.				0.0	0.0	0.0
2. Caring for and helping household members	3.2	2.0	4.4	3.1	2.1	4.1
Caring for and helping household children	2.9	1.7	4.1	2.9	1.9	3.8
Caring for and helping household adults				0.2	0.2	0.2
Caring for and helping household member, N.e.c.				0.0	0.0	0.0
3. Purchasing goods and services	3.1	2.4	3.7	2.9	2.3	3.4
4. Travel related to unpaid hh work	2.7	2.4	3.1	1.4	1.1	1.6
<b>Caring for and helping nonhousehold members</b>				<b>1.1</b>	<b>1.0</b>	<b>1.1</b>
Caring for and helping nonhousehold children				0.5	0.3	0.6
Caring for and helping nonhousehold adults				0.5	0.5	0.4
Caring for and helping nonhousehold n.e.c.				0.0	0.0	0.0
Travel related to caring for & Helping nonhh members				0.1	0.1	0.1
<b>Volunteer activities</b>				<b>0.9</b>	<b>0.9</b>	<b>0.8</b>
Volunteer activities				0.7	0.7	0.7
Travel related to volunteer activities				0.1	0.2	0.1

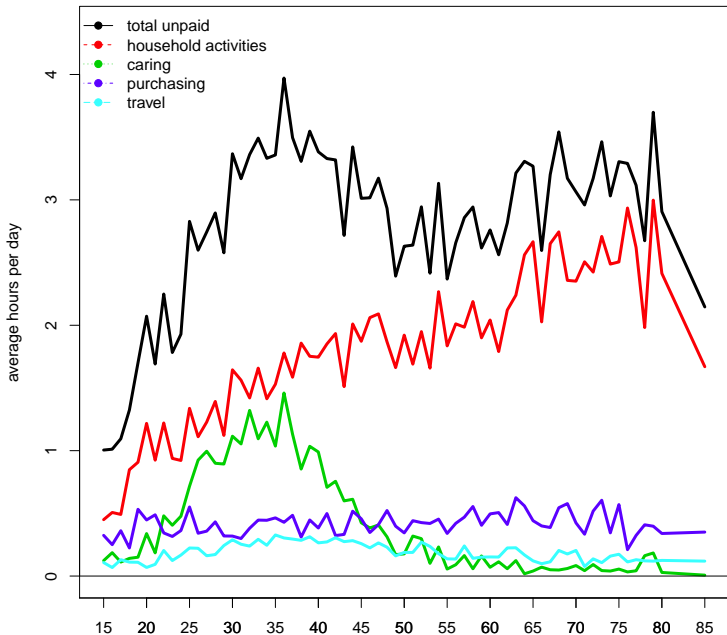
\* n.e.c.: "not elsewhere classified."

## Intra/Inter household time transfers

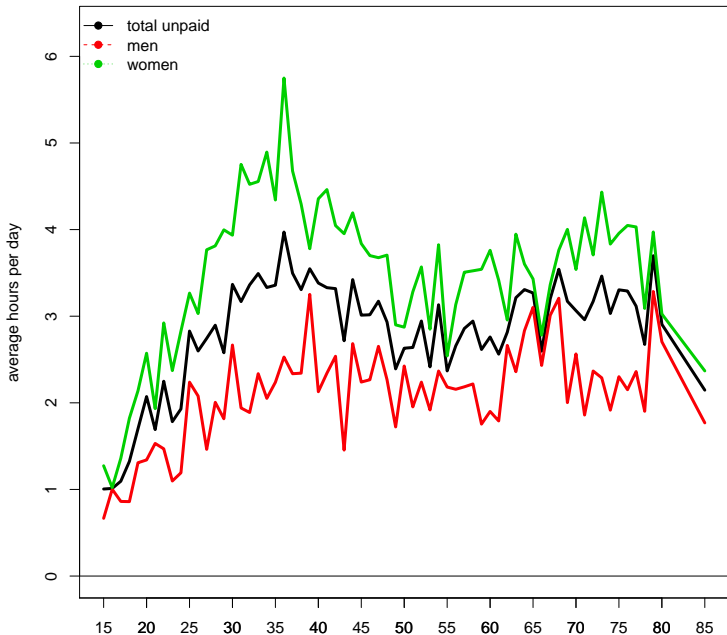
- ▶ Intra-household time transfer outflows: unpaid household work
- ▶ Intra-household time transfer inflows: no information for the demand side. Alternatives:
  1. Proportional allocation using regression method when demand for some categories of household production is dependent on the age distribution of household members; for instance, caring for hh children (Phananiramai 2008);
  2. Equally allocated to every hh member (hh maintenance, purchasing goods, etc.)
- ▶ Inter-household time transfer outflows: caring and helping nonhh members, and volunteer activities
- ▶ Inter-household time transfer inflows: no information for the demand side. Alternatives:
  1. Everyone receive an equal share (Phananiramai 2008);



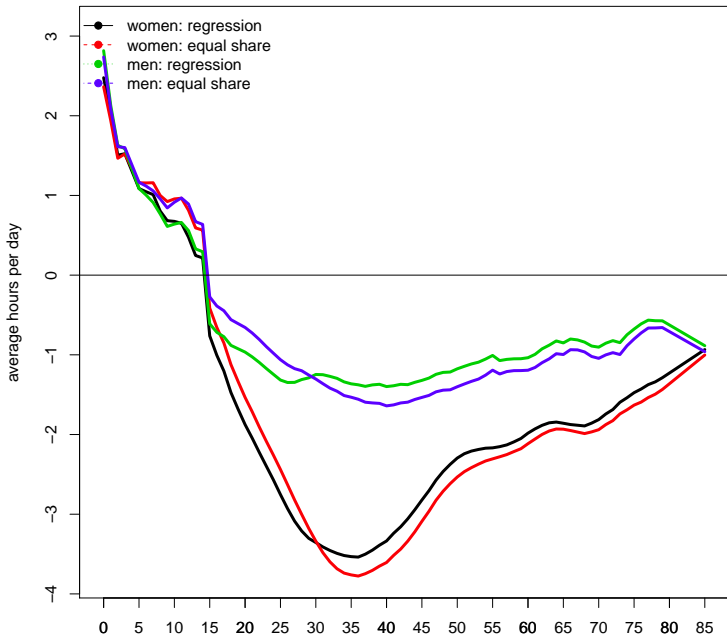
Average hours per day spent doing unpaid household work by age, 2009



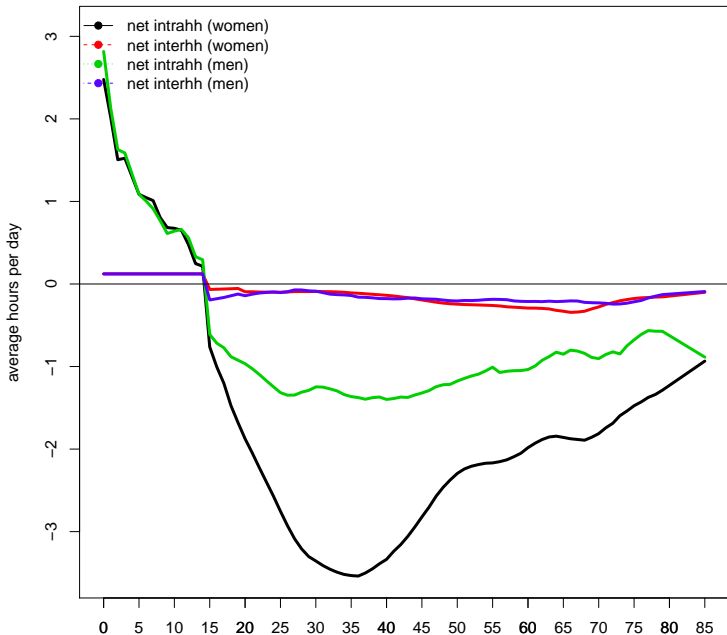
Average hours per day spent doing unpaid household work by age and sex, 2009



Net intrahousehold time transfers by age and sex, 2009



Net intra/inter household time transfers by age and sex, 2009



## Salary rates used to value time production in the U.S.

	BLS owner	average BLS-owner (2009) ws	wqas
Cooking	Food preparation and serving related occupations	9.97 9.97	7.5 7.5
Cleaning	Maids and housekeeping cleaners	10.00 10.00	7.5 7.5
Laundry, sewing and and clothing repair	Laundry and dry-cleaning workers	9.91 9.91	7.4 7.4
Household repair and maintenance	Maintenance and repair workers, general	17.32 17.32	13.0 13.0
Lawn & garden	Landscaping and groundskeeping workers	11.82	8.9
Lawn & garden		11.82	8.9
Household management	Bookkeeping, accounting, and auditing clerks	16.62 16.62	12.5 12.5
Shopping	Hotel, motel, and resort desk clerks	10.16	10.2
Shopping		10.16	10.2
Childcare	Child care workers	9.64	9.6
Eldercare and care outside the home (inc	Medical and public health social workers, Mental health and substance abuse social workers, Social workers, all other	21.06 21.06 21.06	21.1 21.1 21.1
Travel	Hotel, motel, and resort desk clerks	10.16	10.16
	* I am using these wage rates for the last computation.		

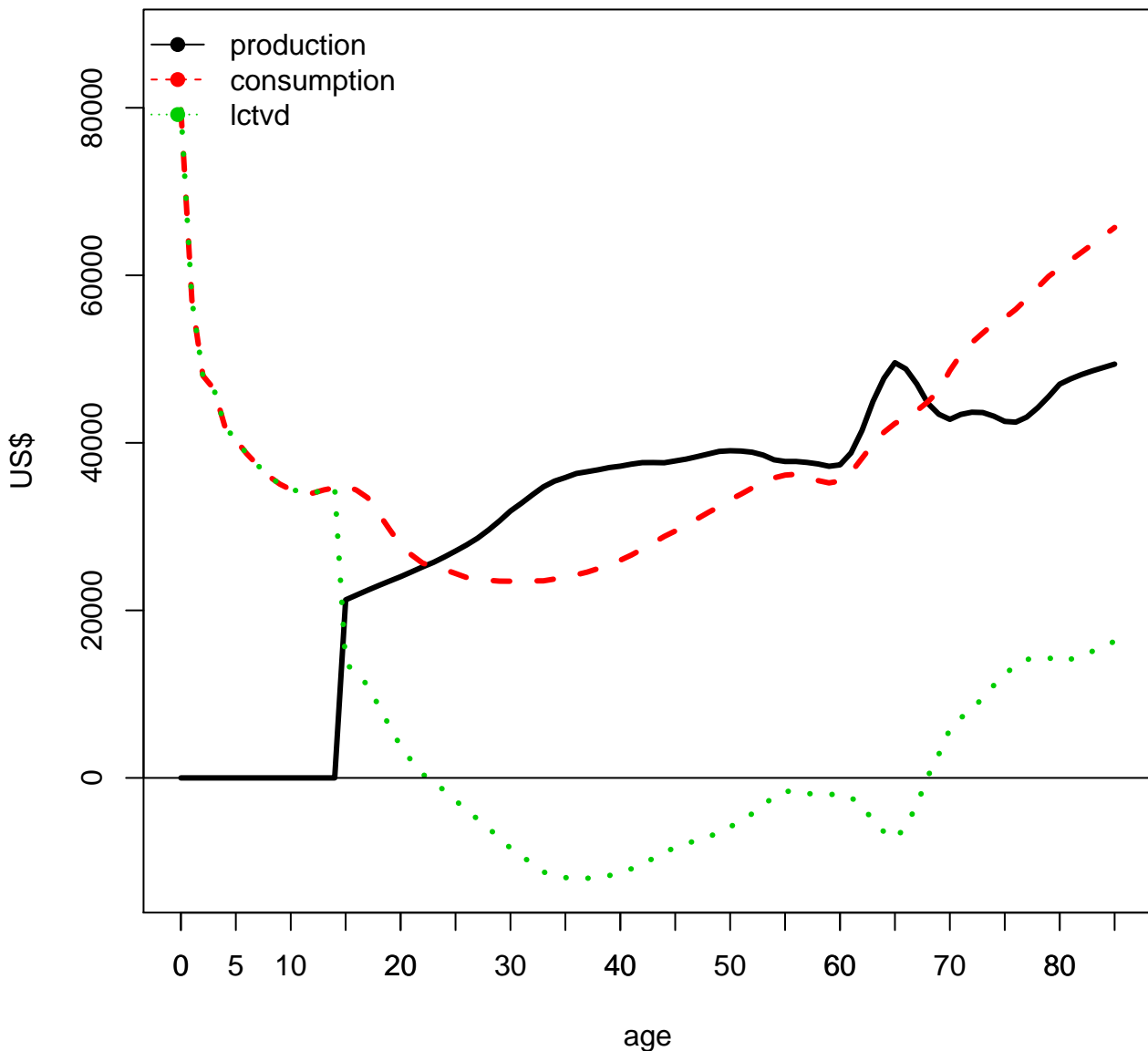
## Conclusions

- ▶ ATUS has been a very good instrument for the distribution of time transfer production, consumption and their evaluation.
- ▶ As expected, the average women spent more time on unpaid productive activities than do men.
- ▶ The evidence shows that the specialist replacement method adjusted by productivity is the preferable method for the monetary valuation of time use production.
- ▶ Using the replacement

Thank you!

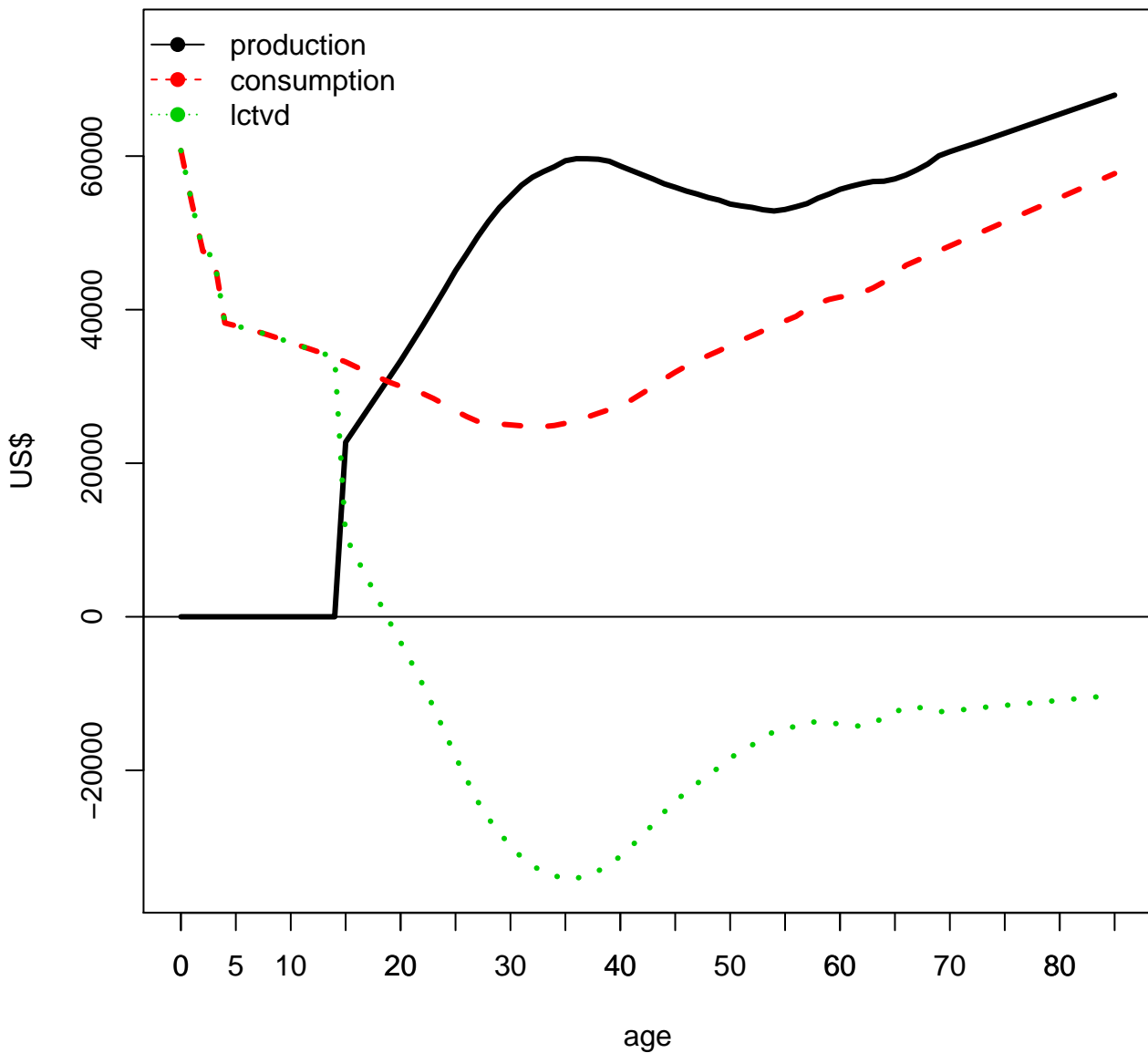
- ▶ Gretchen Donehower and Professor Ronald Lee

# Lifecycle time value deficit: male (U.S. 2009)

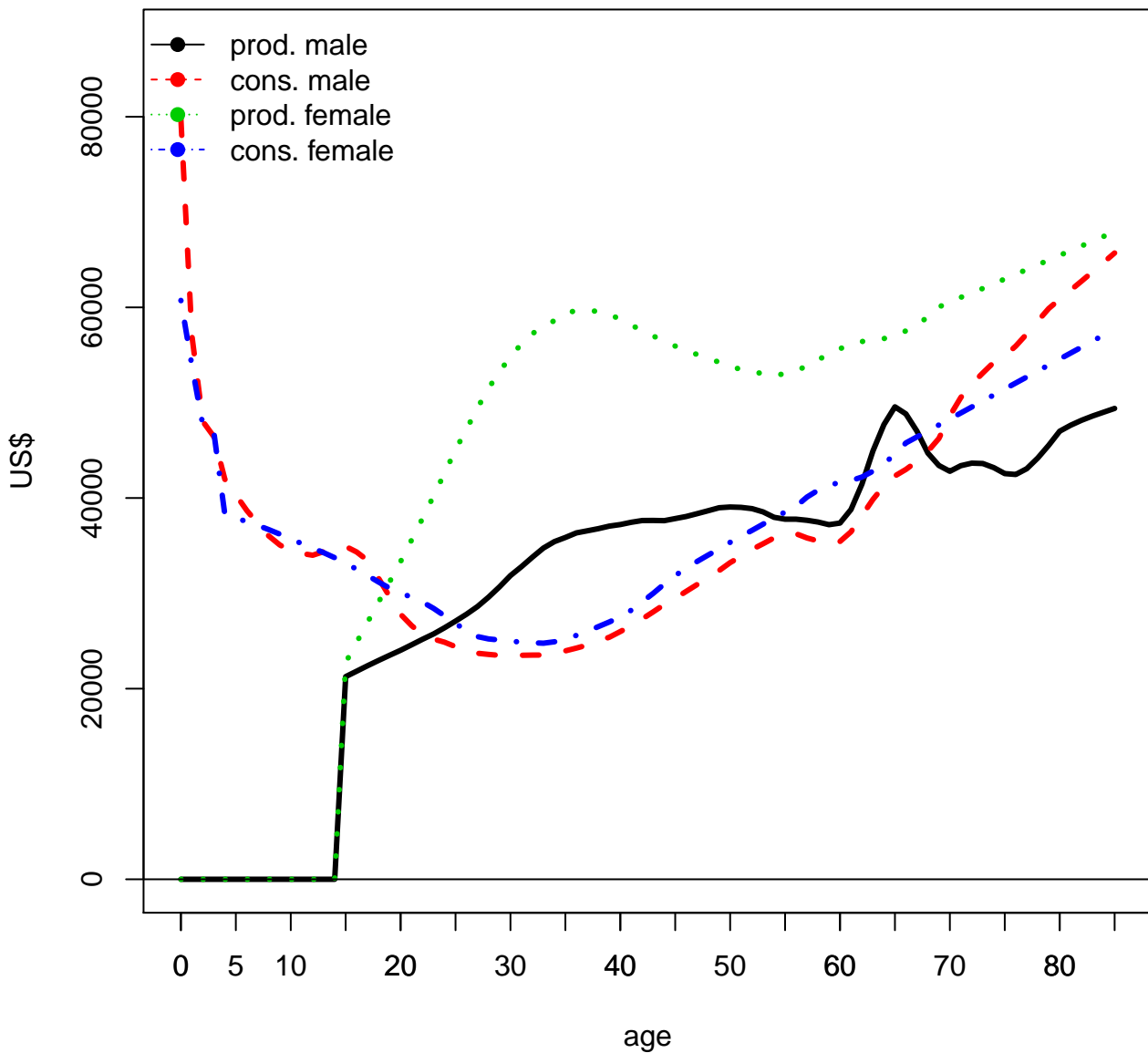




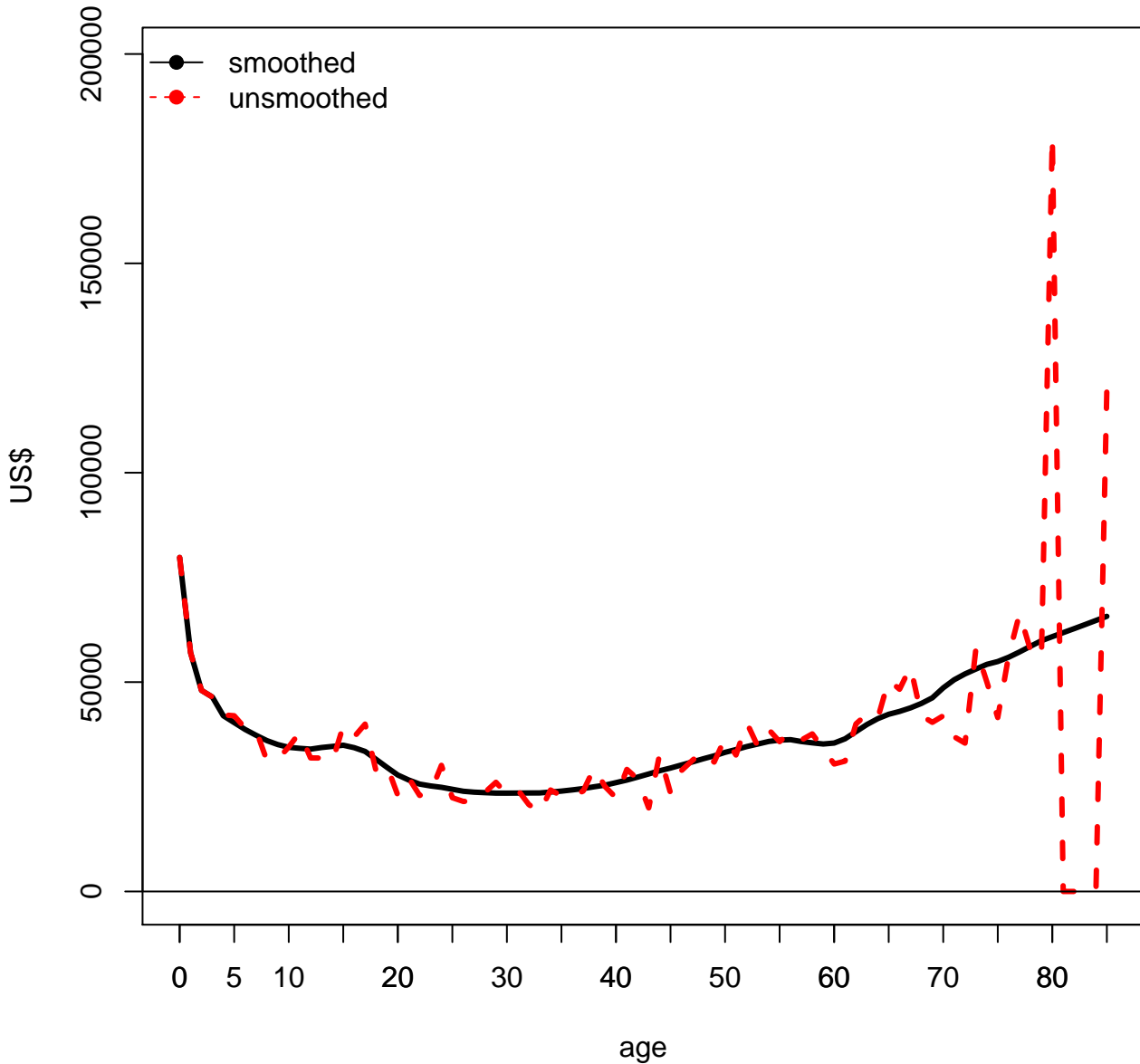
# Lifecycle time value deficit: female (U.S. 2009)



# Lifecycle time value deficit (U.S. 2009)



# Time consumption value: male (U.S. 2009)



# Time consumption value: female (U.S. 2009)

