# Nonmarket Work Among Working-Age Disability Beneficiaries: Evidence From the American Time Use Survey

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# Acknowledgements and Disclaimers

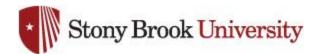
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#### Introduction

- 8 M+ disabled workers received SSDI in 2012
- A lack of labor market participation does not preclude other labor inputs in the form of nonmarket work
- Time diary data are often used to estimate the economic value of nonmarket work (National Research Council 2005)



# Disability, Participation, and Time Use

- Many beneficiaries indicate a desire to work or to develop new skills
- Adults with work/functional limitations report substantial nonmarket time (Anand & Ben-Shalom 2014)
  - Household labor: 80-144 minutes/day
  - Child care: 15-38 minutes/day
  - Volunteering: 7-11 minutes/day



# Study Goals and Data

1. Estimate beneficiaries' daily nonmarket time

2. Calculate replacement wages if nonmarket activities were compensated in the market

3. Compare the contribution of nonmarket labor inputs to GDP and aggregate SSDI payments



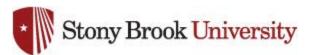
### Study Goals and Data

- 1. Estimate beneficiaries' daily nonmarket time
  - Individual: American Time Use Survey (ATUS) 2003-2012, matched CPS Annual Social and Economic Supplement
- 2. Calculate replacement wages if nonmarket activities were compensated in the market
  - Occupation: hours-weighted means from CPS Outgoing Rotation Groups; O\*NET Job Zones for skill level
- 3. Compare the contribution of nonmarket labor inputs to GDP and aggregate SSDI payments
  - National: World Bank, Social Security Administration

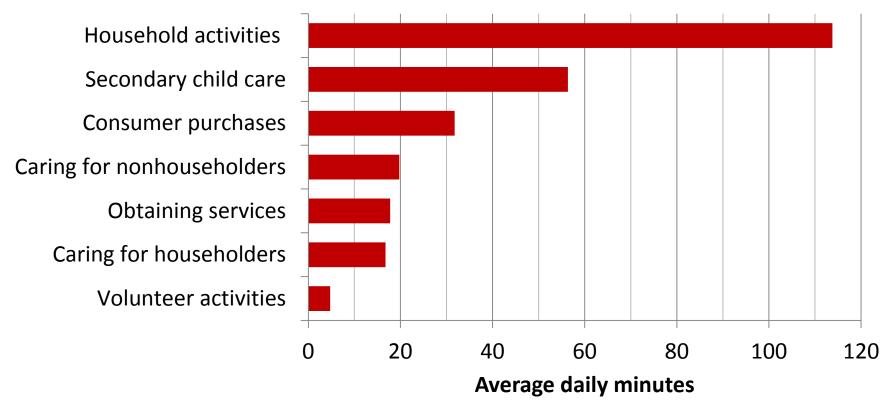
ony Brook University

#### Method

- Sample: 1,028 adults aged 18-64 reporting SSDI receipt for their own disability
- Nonmarket time use categories: housework, care work, consumer purchases, obtaining services, volunteering (Frazis and Stewart 2011)
- Replacement wage calculations: generalist, specialist, quality-adjusted specialist



# Figure 1: Average daily nonmarket time use (aggregate categories)



- Beneficiaries spend the most time in household activities—specifically, housework and food and drink preparation
- Over 1.5 hours is spent in care work, per day
- Total nonmarket time adds to 4 hours and 20 minutes per day

# Replacement Wage Crosswalk

Type of nonmarket activity	Market Occupation	2012 wage	Necessary preparation
Household activities			
Housework	Maids and housekeeping	\$11.31	2. Some
Food and drink preparation	Food preparation workers	\$10.17	1. Little
Appliance, tool, toy repair	Home appliance repairers	\$17.90	3. Medium
Animals and pets	Nonfarm animal caretakers	\$10.90	1. Little

#### **Generalist:**

Total annual nonmarket hours  $\mathbf{x}$  hourly maid wage  $\mathbf{x}$  # beneficiaries

#### Specialist:

Hours per activity **x** matched market occupation wage **x** # beneficiaries

#### Adjusted specialist:

Hours per activity **x** efficiency adjusted market occupation wage **x** # beneficiaries

# Table 1: Nonmarket Labor Inputs as % of GDP and SSDI Expenditures

Total Labor Inputs (in billions of dollars)				Labor Inputs as % GDP			Labor Inputs as % SSDI Payments		
Year	G	S	AS	G	S	AS	G	S	AS
2004	\$88.3	\$93.4	\$85.0	0.72	0.76	0.69	134.6	142.3	129.5
2006	\$102.1	\$107.0	\$97.3	0.74	0.77	0.70	131.6	137.8	125.4
2008	\$119.9	\$124.8	\$113.5	0.81	0.85	0.77	132.6	138.0	125.5
2010	\$135.0	\$142.8	\$130.0	0.90	0.95	0.87	134.0	141.7	129.0
2012	\$150.2	\$153.6	\$139.7	0.93	0.95	0.86	132.3	135.3	123.0

G = generalist wage, S = specialist wage, AS = adjusted specialist wage. Select years.

- In 2012, total labor inputs valued between \$139.7 and \$153.6 billion
- Overall, inputs valued between .69% (2003) and .98% (2011) of GDP
- Overall, inputs valued between 123% (2012) and 146% (2003) of SSDI payments

### Summary

- Beneficiaries spend over 30 hours per week in nonmarket work
  - 13 hours per week in household activities
  - 11 hours per week in care work
- Inputs as % of GDP comparable in size to farms, educational services, nursing facilities
- Inputs surpass aggregate average SSDI payments across all years and methods



# **Implications**

- Beneficiaries report substantial work although not in the market
- Coordination of market opportunities?

#### **Citations**

#### Time Use as Nonmarket Production

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#### Disability and Time Use

 Anand, P., & Ben-Shalom, Y. (2014). How do working-age people with disabilities spend their time? New evidence from the American Time Use Survey. *Demography*, 51, 1977– 1998.

#### ATUS-occupation crosswalk

 Frazis, H., & Stewart, J. (2011). How does household production affect measured income inequality? *Journal of Population Economics*, 24, 3–22.

#### Full paper

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 Evidence From the American Time Use Survey. *Journal of Disability Policy Studies*, DOI:
 1044207315587569.



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