SP25 7130: Homework 2

Danbo CHEN

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1 Question 1.4

(4) Solution:

1.1 Summary of Findings

1. Program Impact on Expenditures

- **Non-food expenditures increased significantly** ($\beta_1 = 28.844$, $p < 0.05$).

- **No significant effect on food expenditures** after adding baseline controls.

2. Role of Baseline Covariates

- **Household size** increases both **food** ($+50.73$, $p < 0.01$) and **non-food** ($+14.19$, $p < 0.01$) expenditures.

- **Education increases non-food spending** ($\beta_3 = 11.624$, $p < 0.01$).

- **Remittances increase non-food expenditures** ($\beta_5 = 0.896$, $p < 0.01$), but have no effect on food expenditures.

3. Econometric Concerns

- **Omitted variable bias (OVB)**: The simple ITT model **overestimated** the treatment effect on food expenditures.

- **Low R^2 values**: Even after adding controls, **unobserved factors drive expenditures**.

- **Potential endogeneity**: Treatment assignment may correlate with **unobserved household characteristics**.

4. Policy Implications

- **Cash transfers increase non-food spending**, supporting broader welfare needs.

- **Larger households spend more**; transfers should **consider household size**.

- **Education and remittances shape financial decisions**, suggesting **long-term benefits** from cash transfers.

Conclusion The cash transfer program effectively increased **non-food expenditures**, but its impact on **food expenditures is limited**. Future studies should explore **heterogeneous effects** and potential **long-term benefits**.

2 Question 3.1

Table 1: OLS Regression with Sensitivity Analysis

	Dependent variable:
	release
fac	0.058*** (0.006)
facsq	−0.0003*** (0.0001)
herf	−0.649** (0.291)
empl	0.024*** (0.001)
emplsq	−0.00003*** (0.00000)
fg	−0.355*** (0.086)
strictbar	0.072 (0.190)
educbar	−0.083** (0.041)
lawbar	0.182 (0.143)
spendbar	−0.032 (0.086)
pstatus	−0.563*** (0.079)
Constant	1.302*** (0.457)
Observations	901
R^2	0.464
Adjusted R^2	0.457
Residual Std. Error	1.138 (df = 889)
F Statistic	69.978*** (df = 11; 889)
Note:	*p<0.1; **p<0.05; ***p<0.01

3 Question 3.2