EC4041 Development Economics

Problem set 1

Question 1

1. Comment on the following table, taken from the paper by Esther Duflo (2003) "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold allocation". Make sure to refer to the literature discussed in class and to the characteristics of the Old-Age pension program.

Table 1: Dependent Variable: Weight per height

Variable	Girls	Boys
Mother's mother	0.48*	0.099
Eligible	(0.21)	(0.27)
Father's mother	0.15	0.29
Eligible	(0.25)	(0.30)
Mother's father	0.097	0.00052
Eligible	(0.34)	(0.43)
Father's father	0.22	0.25
Eligible	(0.48)	(0.44)
Observations	1,457	1,552
Control Variables		
Presence of older members[a]	Yes	Yes
Family background variables[b]	Yes	Yes
Age dummy variables[c]	Yes	Yes

* Significant at the five percent level.

2. Comment on the following table, taken from the paper by Esther Duflo (2003) "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold allocation". Make sure to refer to the literature discussed in class and to the characteristics of the Old-Age pension program.

Table 2. Dependent Variable: Height per Age

	(1)	(2)
Girls		
Eligible household * YOUNG	0.68*	
	(0.37)	
Woman treatment variable * YOUNG		0.71*
		(0.34)
Man treatment variable * YOUNG		0.097
		(0.57)
Eligible household	–0.17	
	(0.16)	
Woman pension variable		–0.15
		(0.17)
Man pension variable		–0.11
		(0.24)
Observations	1,533	1,533
Boys		
Eligible household * YOUNG	0.11	
	(0.31)	
Woman pension variable * YOUNG		0.18
		(0.32)
Man pension variable * YOUNG		–0.30
		(0.32)
Eligible household	–0.15	
	(0.15)	
Woman pension variable		–0.14
		(0.32)
Man pension variable		–0.073
		(0.21)
Observations	1,627	1,627
Control variables		
Age dummy variables[a]	Yes	Yes
Family background variables[b]	Yes	Yes

Note that the variable YOUNG is a dummy variable which takes value 1 if the child is born in January 1992 or later and 0 otherwise.

Question 2

Consider a household with two members, the husband (h) and the wife (w). The wife earns income y_w, while the husband earns income y_h. There exists a single good x. Denote with x_w and x_h the quantity of good x consumed by the wife and the husband. Assume that the husband and wife have the same preferences, represented by the utility function $u(x_i)$.

1. Consider a unitary model where the benevolent dictator weights the husband's utility less than the wife's utility. Write down the maximization problem.
2. Consider a bargaining model where each HH member's outside option is a function of his/her earned income, $V(y_i)$, $i = h, w$. Write down the maximization problem.
3. How does the solution for the bargaining model differ from the solution found for the unitary model?