AMS - Paper

Release 1.0

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Packages

ams_functions.**budget_constraint** (*age*, *edu*, *school=1*, *gender='girl'*, *group='treatment'*, *g=3.334*, *b_progressa=0.0605*, *hr_day=7.9*, *days=5.1*, *weeks=2*, *days_weeks=14*)

This function returns the child budget constraint living in a village, conditional on working or going to school

Parameters
- **age** (*int*) – Child age.

- **edu** (*int*) – Child education.

- **school** (*int*, *optional*) – School or Work. Defaults to 1.

- **gender** (*str*, *optional*) – _description_. Defaults to 'girl'.

- **group** (*str*, *optional*) – In the treatment or control group. Defaults to 'treatment'.

- **g** (*float*, *optional*) – Coefficient in the utility for the grant. Defaults to 3.334.

- **b_progressa** (*float*, *optional*) – Progressa dummy coefficient. Defaults to 0.0605

- **hr_day** (*float*, *optional*) – Average hours worked per day. Defaults to 7.9.

- **days** (*float*, *optional*) – Average days worked. Defaults to 5.1.

- **weeks** (*int*, *optional*) – Average weeks worked. Defaults to 2.

- **days_weeks** (*int*, *optional*) – Days in the weeks worked. Defaults to 14.

Returns The budget constraint of the child in a particular village

Return type b (float)

ams_functions.**edu_cost** (*age=10*, *edu=5*, *mom_edu=1*, *cost_sec=9.5*, *pri=1*, *μ=- 9.706*, *b_age=2.291*, *b_mom=- 0.746*, *b_edu=- 0.983*, *b_sec=0.007*)

This function returns the child cost of going to school

Parameters
- **age** (*int*, *optional*) – Child age. Defaults to 10.

- **mom_edu** (*int*, *optional*) – Mother's education. Defaults to 1.

- **edu** (*int*, *optional*) – Child education. Defaults to 5.

- **cost_sec** (*float*, *optional*) – Cost. Defaults to 9.5.

- **pri** (*int*, *optional*) – If the child is attending primary school. Defaults to 1.

- **μ** (*float*, *optional*) – Shifter coefficient for the child. Defaults to -9.706.

- **b_age** (*float*, *optional*) – Age coefficient. Defaults to 2.291.

- **b_mom** (*float*, *optional*) – Mother background coefficient. Defaults to

-0.746.

- **b_edu** (*float*, *optional*) – Education coefficient. Defaults to -0.983.

- **b_sec** (*float*, *optional*) – Secondary education coefficient. Defaults to 0.007.

Returns   The cost of going to school for the child

Return type cost (float)

ams_functions.**grant** (*edu=5, gender='girl'*)
    This function aims to return the payment received by a child based on the payment schedule defined for PROGRESSA (Table 1)

Parameters   • **edu** (*int, optional*) – Child Education. Defaults to 5.

- **gender** (*str, optional*) – Child gender. The program has different payment schedules by gender, can be 'girl' or 'boy'. Defaults to 'girl'.

Returns   The amount payed for the child

Return type g (int)

ams_functions.**terminal_v** (*α1=356.38086340313265, α2=0.27915167692210985, edu=5*)
    This function measures the utility gain of completing a determined x years of education bt age 18

Parameters   • **edu** (*int, optional*) – Child education. Defaults to 5.

- **α1** (*int, optional*) – Parameter 1. Defaults to 5.876

- **α2** (*int, optional*) – Parameter 2. Defaults to -1.276

Returns   Terminal value

Return type tv (float)

ams_functions.**utility** (*age=10, edu=5, school=1, ε=0, δ=0.134, μ=- 9.706*)
    This function measures the utility gain for the child based on the choice of schooling or working

Parameters   • **school** (*int, optional*) – School or Work. Defaults to 1.

- **edu** (*int, optional*) – Child education. Defaults to 5.

- **age** (*int, optional*) – Child age. Defaults to 10.

- **g** (*float, optional*) – Coefficient in the utility for the grant. Defaults to 3.334.

- **δ** (*float, optional*) – Coefficient in the utility for the grant. Defaults to 0.134.

- **μ** (*float, optional*) – Coefficient in the utility for the grant. Defaults to -9.706.

- **ε** (*float, optional*) – Shock for school taste

Returns   Utility gain from the decision

Return type u (float)

ams_functions.**wage** (*age=10, edu=5, w_ag_j=27.6, q=- 0.983, a1=0.066, a2=0.0166, b_w_ag=0.883*)
    This function aims to estimate the wage for the village where the child lives

Parameters   • **age** (*int, optional*) – Child age Defaults to 10.

- **edu** (*int, optional*) – Child education. Defaults to 5.

- **w_ag_j** (*float, optional*) – Adults wage in the village. Defaults to 27.6.

- **q** (*float, optional*) – Intercept. Defaults to -0.983.
- **a1** (*float, optional*) – Age coefficient. Defaults to 0.066.
- **a2** (*float, optional*) – Education coefficient. Defaults to 0.0166.
- **b_w_ag** (*float, optional*) – Adults wage coefficient. Defaults to 0.0166.

Returns   This is the log wage base in the village where the child lives

Return type w (float)

- genindex
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