

Multi-regional input-output data

Country r	Sector s	Sectoral carbon intensity $e_{s,r}$
r_1	s_1	$e_{1,1}$
r_1	s_2	$e_{1,2}$
...
r_{160}	s_{65}	$e_{160,65}$

Household budget survey data

Household i	Characteristics X_i	Sectoral expenditure shares $w_{i,r,s}$
1	X_1	$w_{1,r,1}$
2	X_2	$w_{2,r,1}$
...
n	X_n	$w_{n,r,65}$

A)

i	X_i	$w_{i,r,s}$	$e_{s,r}$
1	X_1	$w_{1,r,1}$	$e_{r,1}$
1	X_1	$w_{1,r,2}$	$e_{r,2}$
...
2	X_2	$w_{2,r,1}$	$e_{r,1}$
...
n	X_n	$w_{n,r,65}$	$e_{r,65}$

$$e_i = \sum_s e_{s,r} * w_{i,r,s}$$

B)

Household i	Characteristics X_i	Carbon intensity of consumption e_i
1	X_1	e_1
2	X_2	e_2
...
n	X_n	e_n

Final dataset for 88 countries r