Can basic entrepreneurship transform the economic lives of the poor?

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Background

- The world’s poor lack both capital and skills
- They tend to be (under) employed in low-return, often insecure, occupations
- Economic theory studies whether and how giving capital and skills can alter the poor's occupational choices and make them exit poverty
- Most antipoverty programs attempt to do this:
  - capital: microfinance, banking, asset transfers
  - skills: vocational training, adult education

Questions

Low capital and skills

?

Labor supply and occupational choice

?

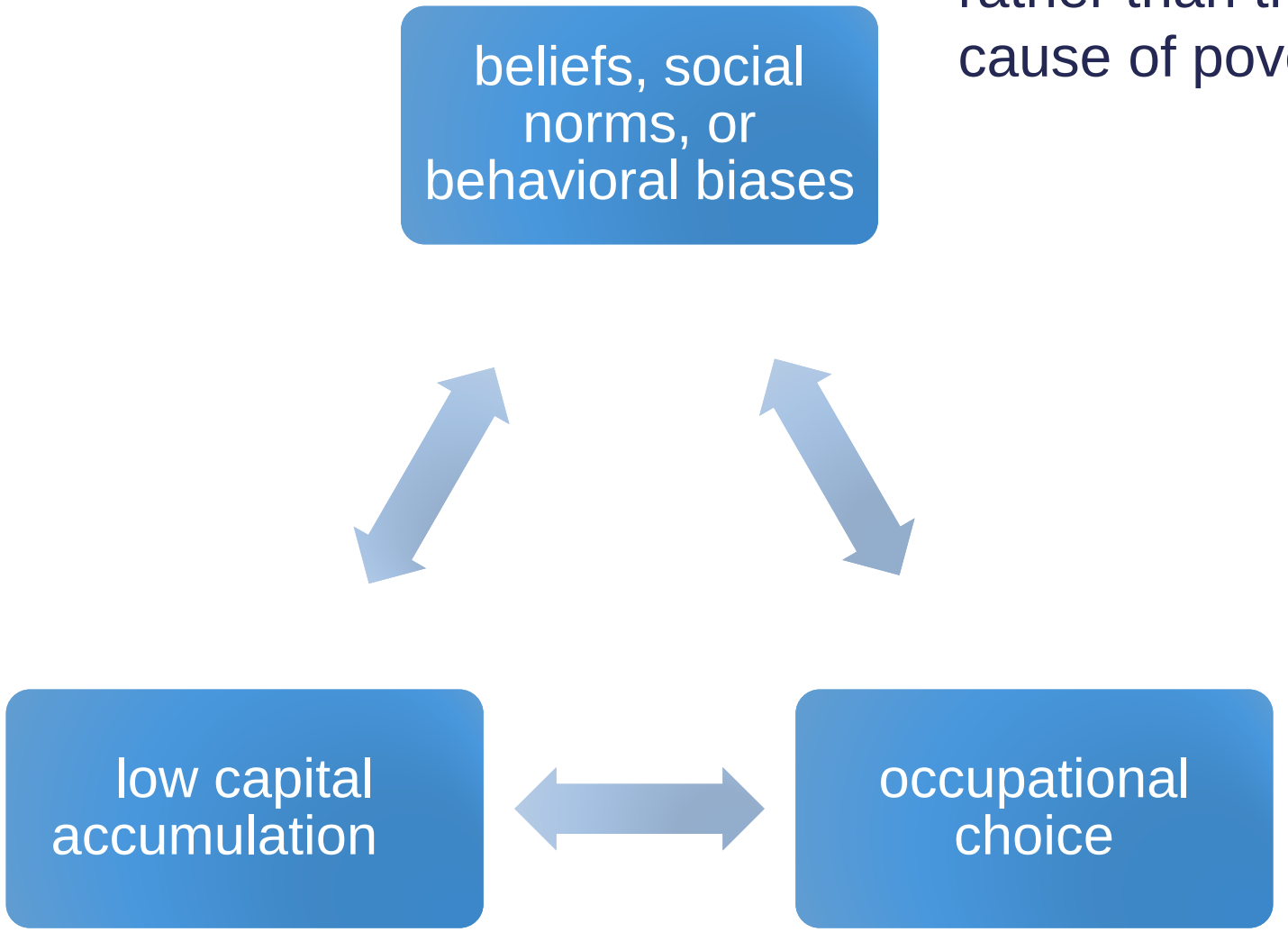
Poverty

Questions

- Can transfers of capital and skills transform the poor's occupational choices?
  - moving away from insecure wage labor..
  - ..towards running small businesses
  - increasing stability
  - reducing uncertainty and seasonality
- Can this set them on a sustainable path out of poverty?

Reasons to be skeptical:

lack of capital and skills are a symptom rather than the cause of poverty



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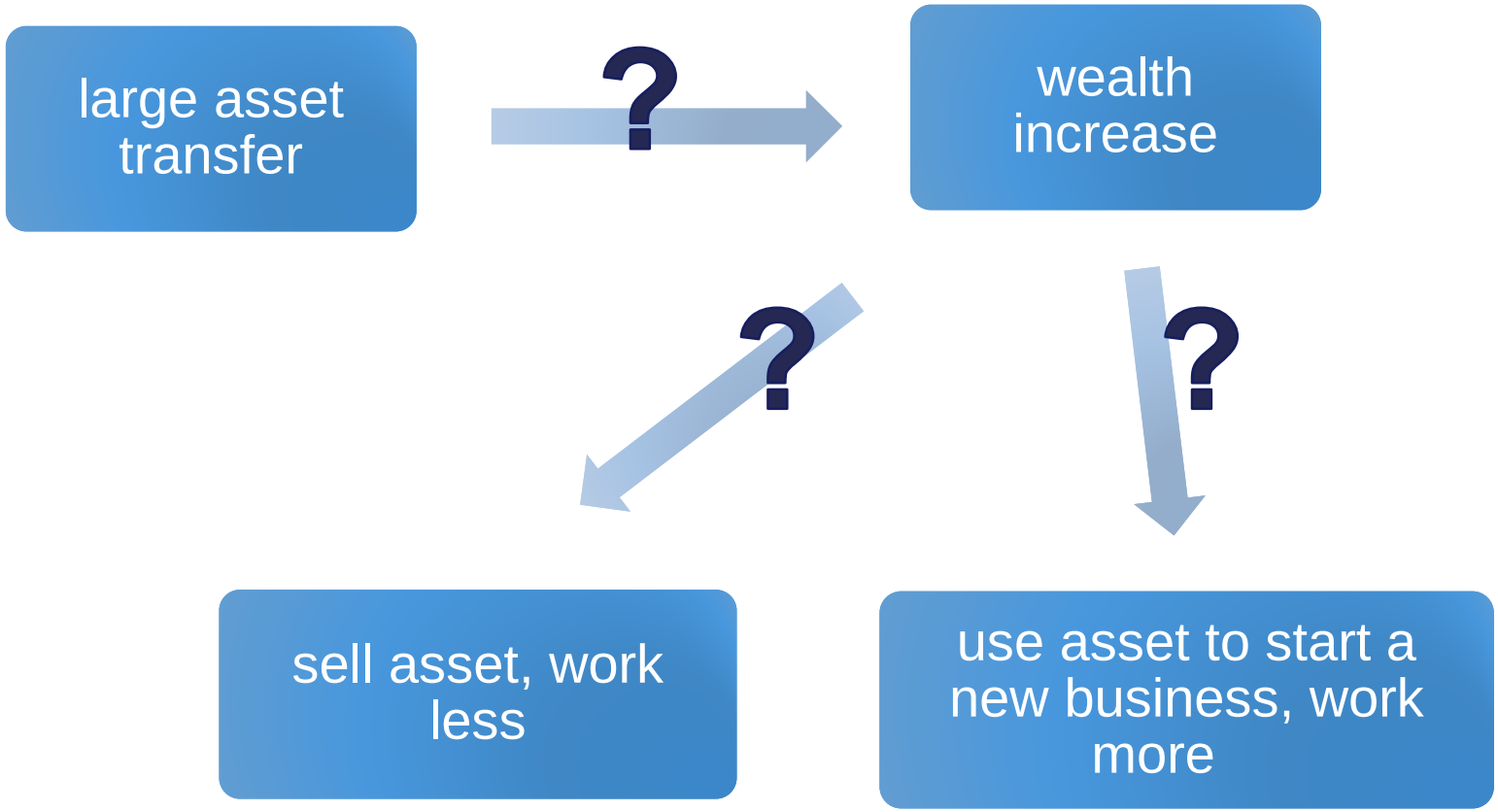


This paper

- Evaluate BRAC's TUP program, which aims to shift ultrapoor women from insecure wage labor to self-employment (as practiced by richer women in the same communities)
  - 370k ultra poor households currently treated Bangladesh, and pilots running in ten other countries
- Provide evidence on transferring both capital and skills transforms the occupational choices of the poor
  - bringing them closer to the occupational choices of the middle classes in their communities
  - providing a sustainable route out of poverty

Roadmap

1. Program description
2. Economic lives at baseline: ultra-poor and others
3. Evaluation strategy
4. Evaluation findings
   - Occupational structure
   - Assets
   - Earnings and consumption
5. Closing the gap
6. Costs and benefits
7. Beyond economic outcomes

Program description

- Beneficiaries: poorest women in rural Bangladesh
- Main components:
  - asset transfer (from a menu)
    - most choose a livestock combination, 90% at least one cow
    - average value TK9500=USD140
  - asset specific training
    - classroom training at BRAC's
    - asset specialist every 1-2 months for 1 year
    - BRAC officer every week for 2 years
  - microfinance training and enrollment after 18-24 months

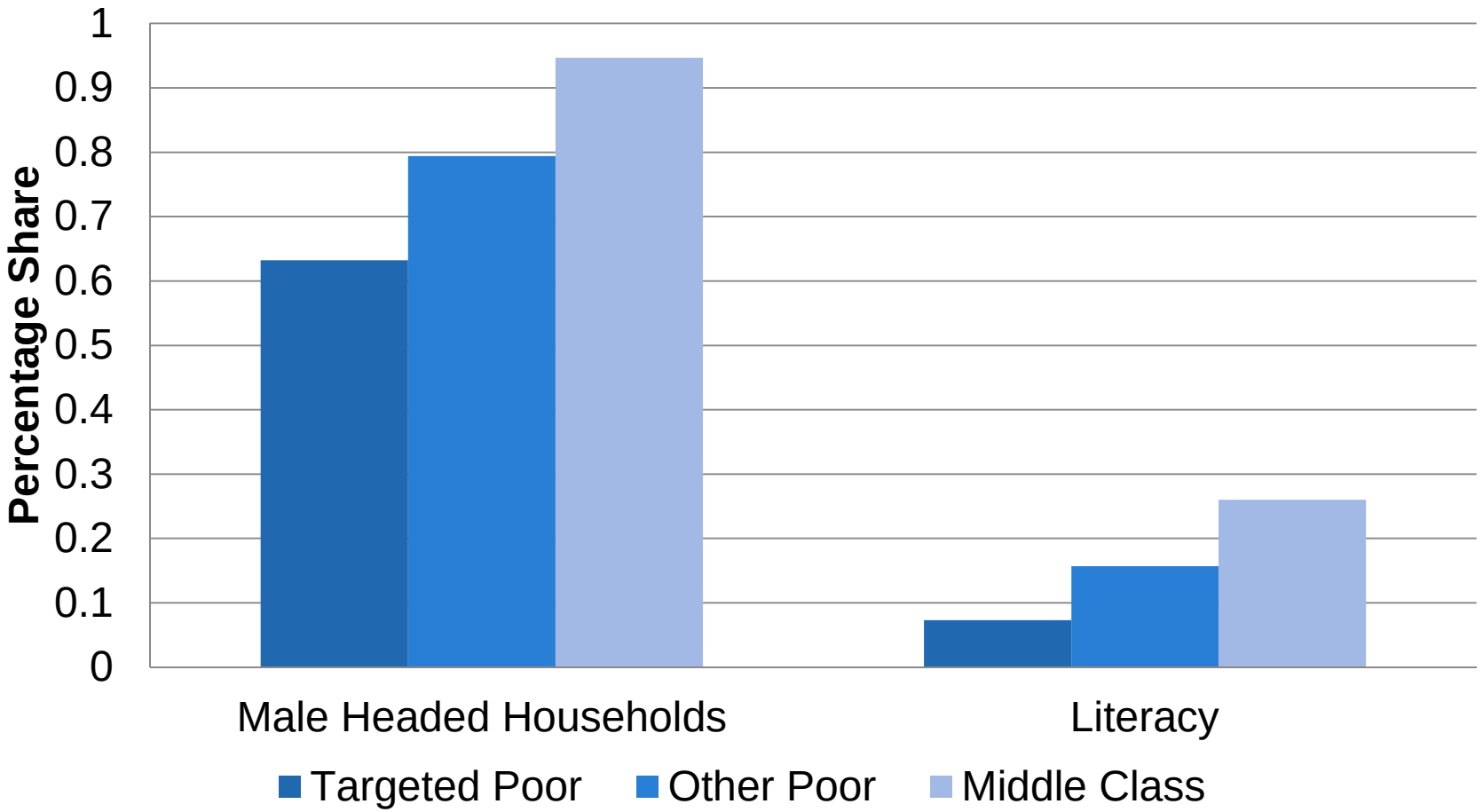
Program Description: Selection

- PRA exercise: community ranks all households into 5 wealth groups
  - yields precise wealth rank for all households
- BRAC officers visit households in the lowest wealth groups and choose those that satisfy the program's criteria to become Specially Targeted Ultra Poor (STUP)

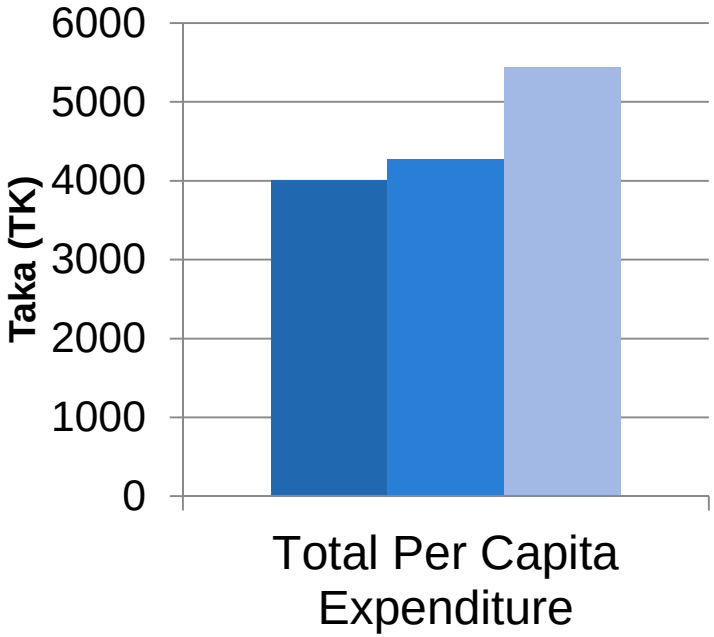
Criteria

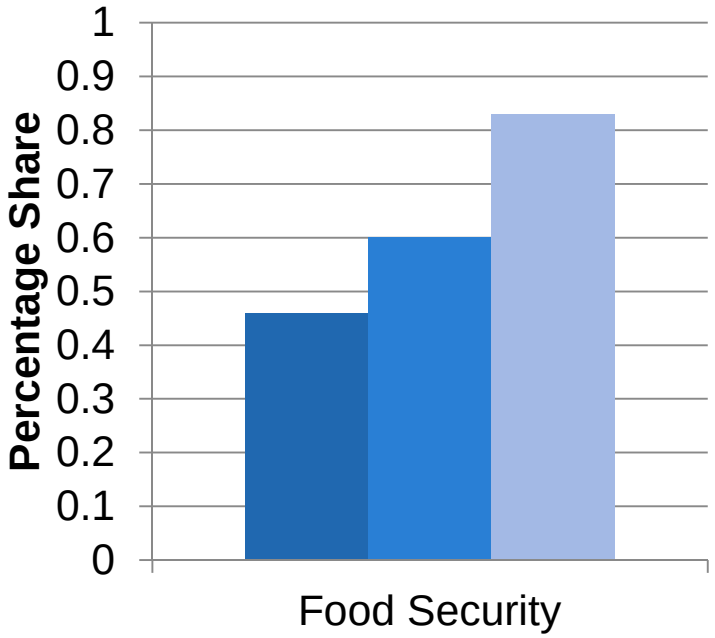
- 3 binding exclusions:
  - borrowing from MFI
  - receiving government anti-poverty
  - no adult women
- 3 out of 5 inclusions:
  - land owned<=10 decimals
  - no adult male earner
  - adult women work outside the homestead
  - school-age children working
  - household has no productive assets

Baseline: gender and skills

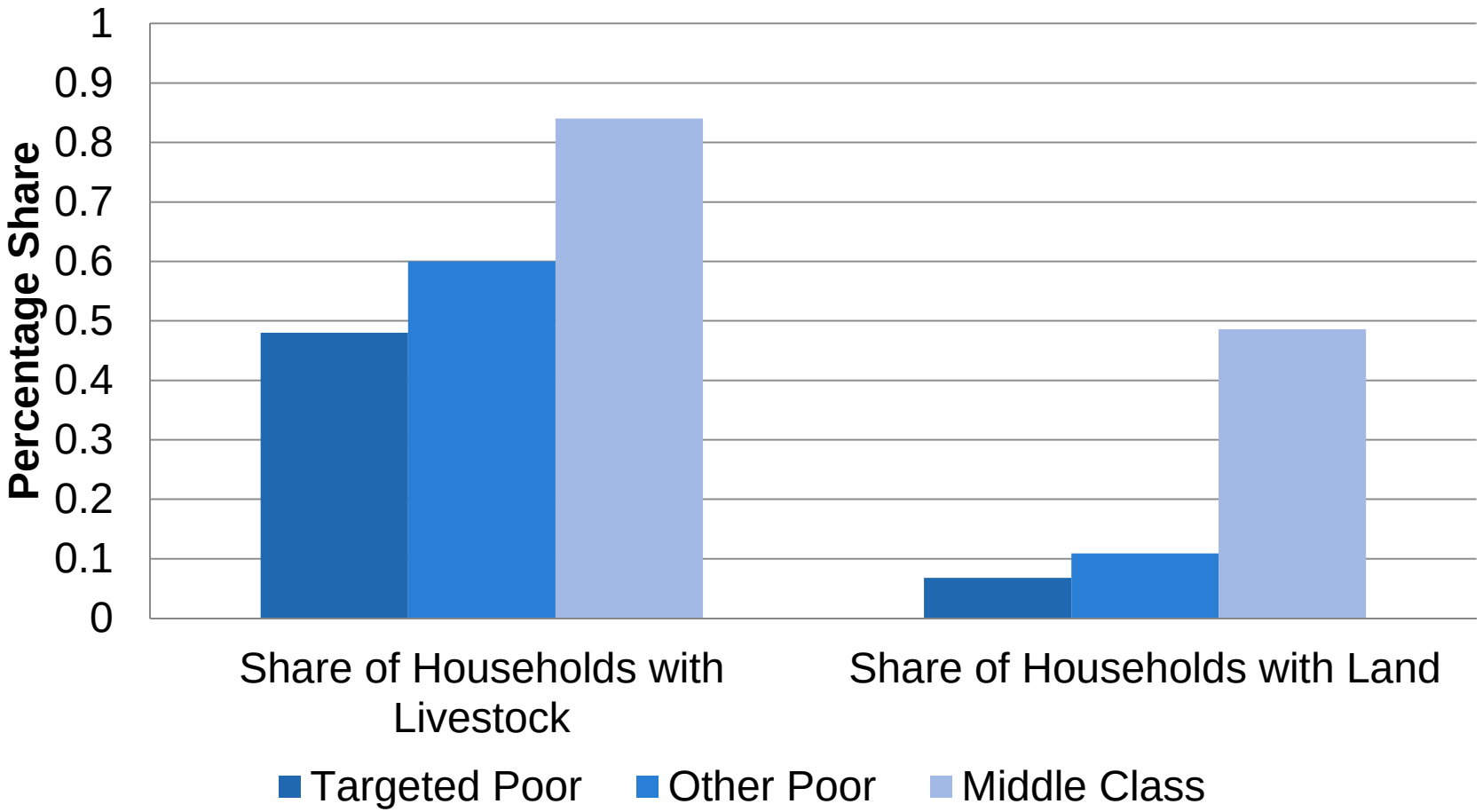


Baseline consumption

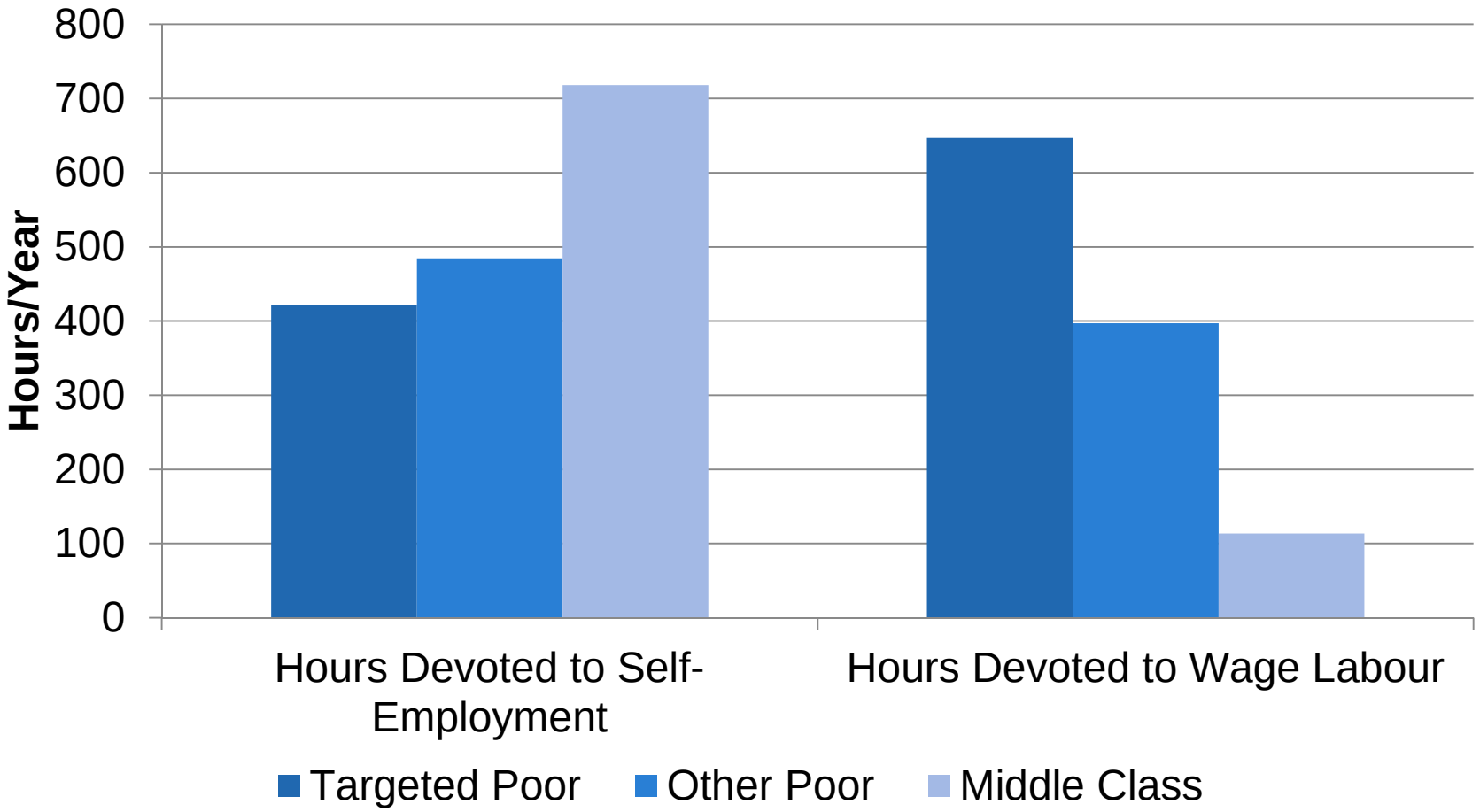




Baseline productive assets



Baseline occupational choices



What do the ultrapoor do?

- Self employment:
  - cows rearing (24%), poultry rearing (46%)
    - median no of days 350
- Wage labor:
  - maid (33%)
    - median no of days working as maid in main occupation 160
  - agricultural day laborer (28%)
    - median no of days working as day laborer in main occupation 140

Snapshot at baseline

- targeted poor have fewer productive assets and are employed in low return, insecure wage labor
- correlation between assets, occupational choice and poverty holds across households
  - can asset transfers transform the occupational choices of the poorest women?

Evaluation strategy

- Randomize the program roll-out across 40 BRAC branch offices (1409 communities) in the poorest areas of the country
  - 20 treated in 2007, 20 in 2011
- Stratify by sub-district (upazila) - 97sq miles- lowest regional division
  - randomly choose 2 branches within each upazila, one treatment, one control
- Randomize at the branch rather than community level to minimize contamination
  - average distance between treatment and control branch:12km

Evaluation strategy

- Beneficiaries selected in both treatment and control communities, informed of their status only when treated
- Beneficiaries + all other poor + a sample of other wealth classes surveyed in 2007, 2009, 2011
  - Attrition over the four years is 15%, both in treatment and control communities

Methodology

- We compare potential beneficiaries in treatment and control communities before and after the program
- Participation rate is 86%
- Measure effect of the program on:
  - occupational choice
  - productive assets
  - earnings and consumption
- Benchmark size of effects on gaps vs. other wealth classes

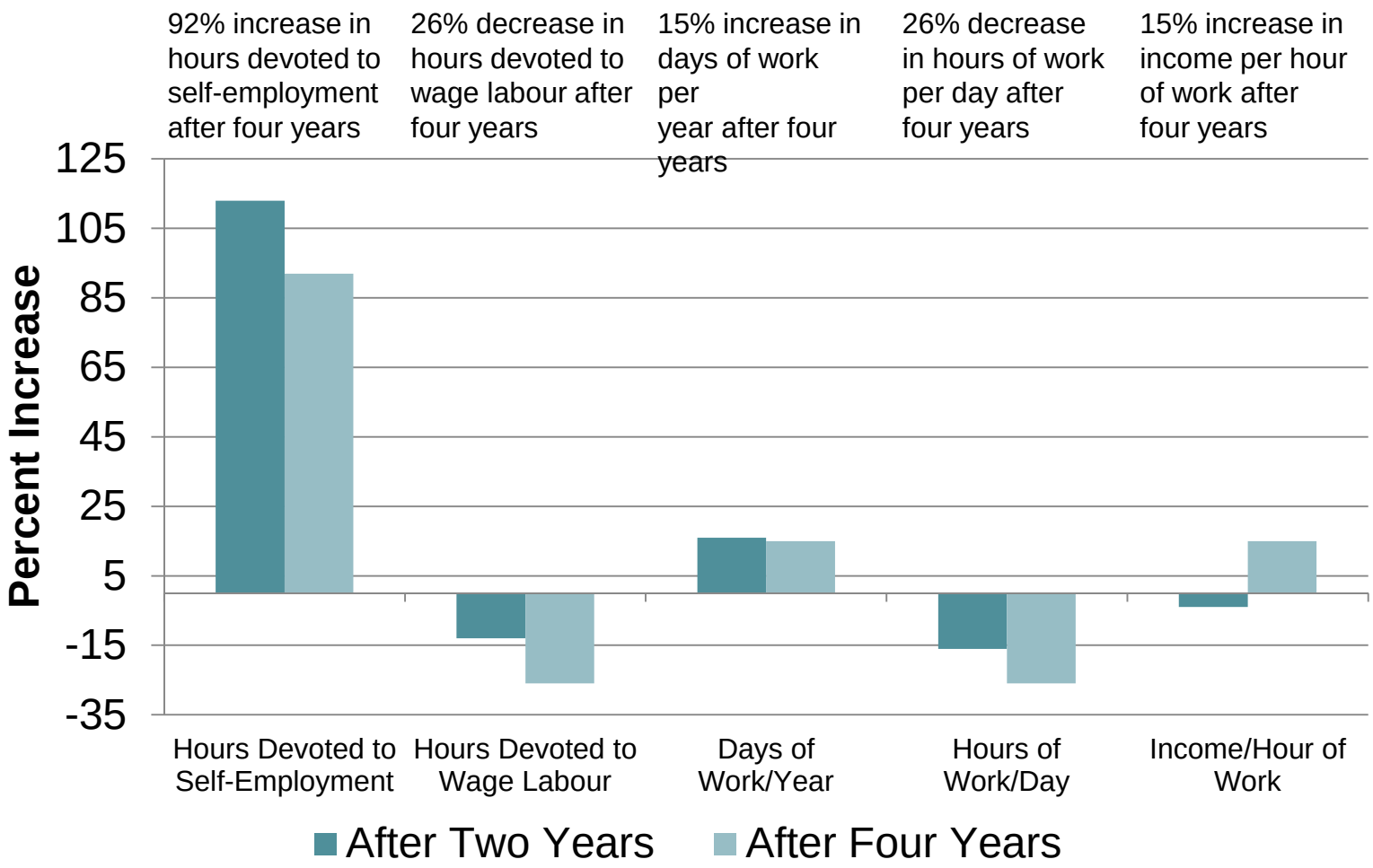
Most UP maintain or increase asset stock

share of UP who receive:	2 cows	1 cow + 2 goats or 10 chicks	2 goats + 10 chicks	5 goats OR 40 chicks
	36%	52%	8%	4%

share of UP who: *(net of transfer)*	decrease cow stock	maintain cow stock	increase cow stock
after two years	17%	62%	21%
after four years	35%	34%	31%
after four years - control	*3%*	*89%*	*8%*

less than 2% of cows are rented out

Program transforms occupational choices

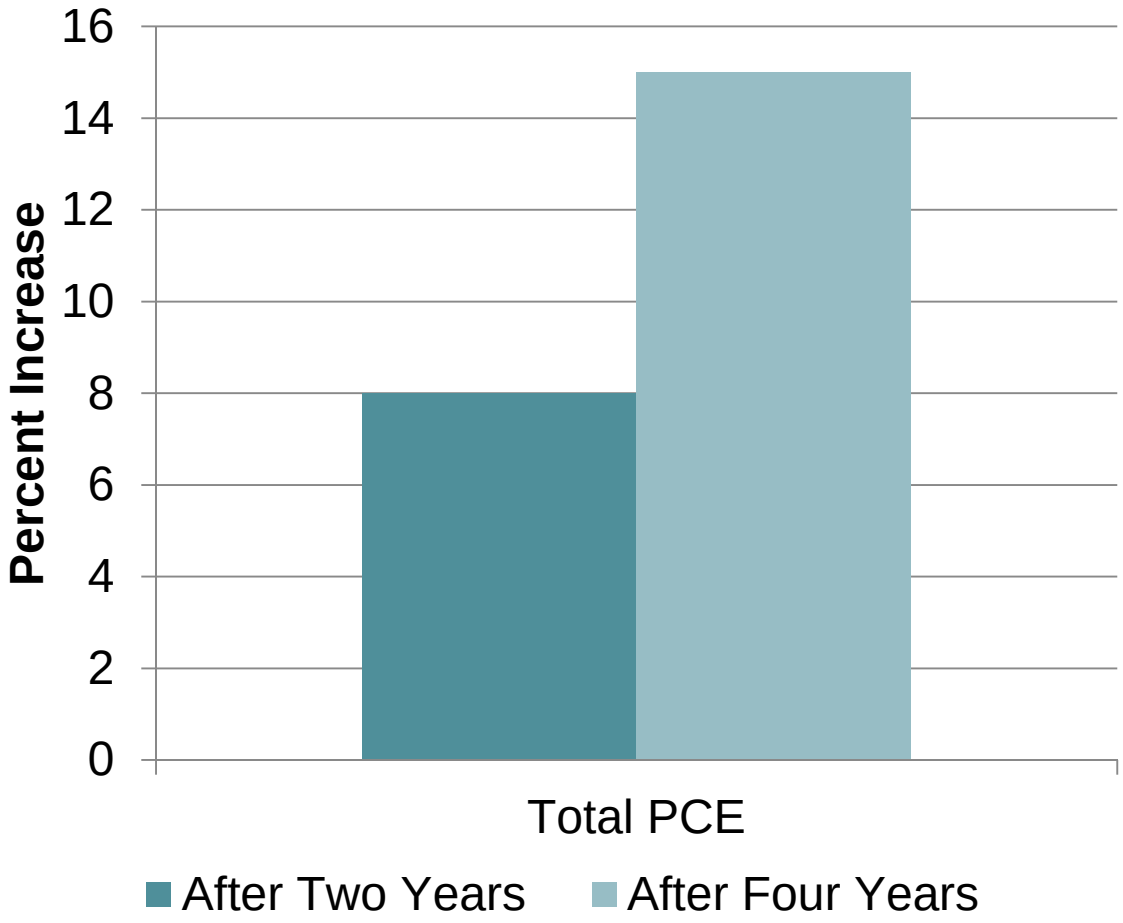


Program increases earnings

33% increase after two years

38% increase after four years

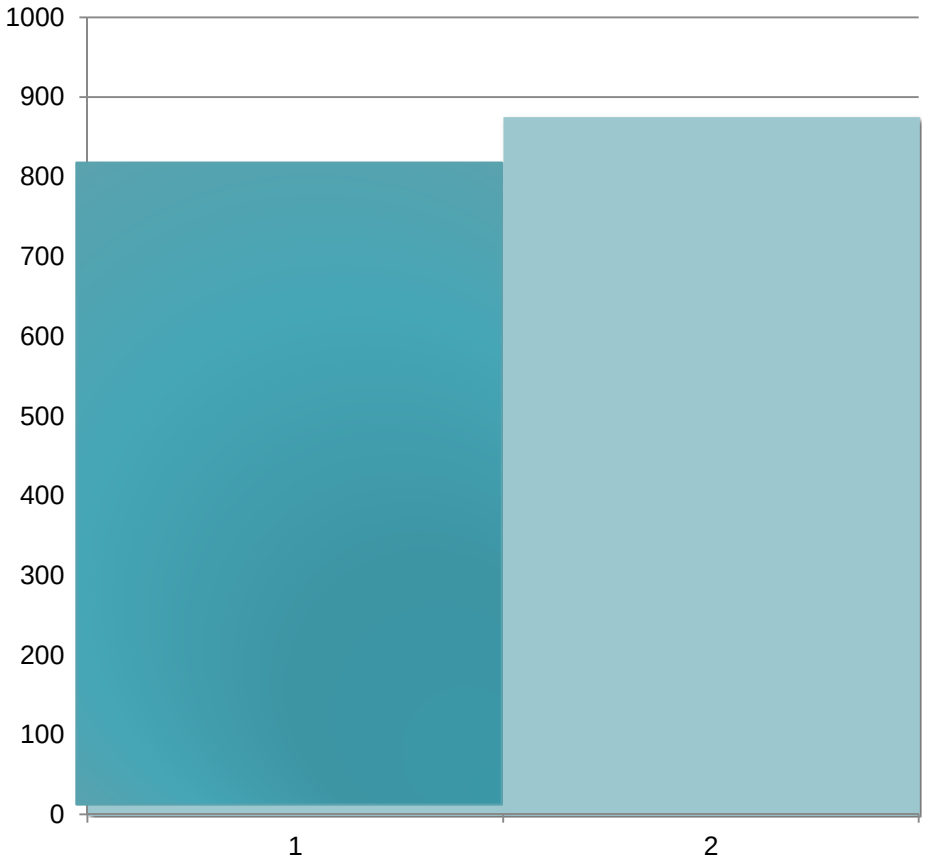
Program increases consumption



8% increase after two years

15% increase after four years

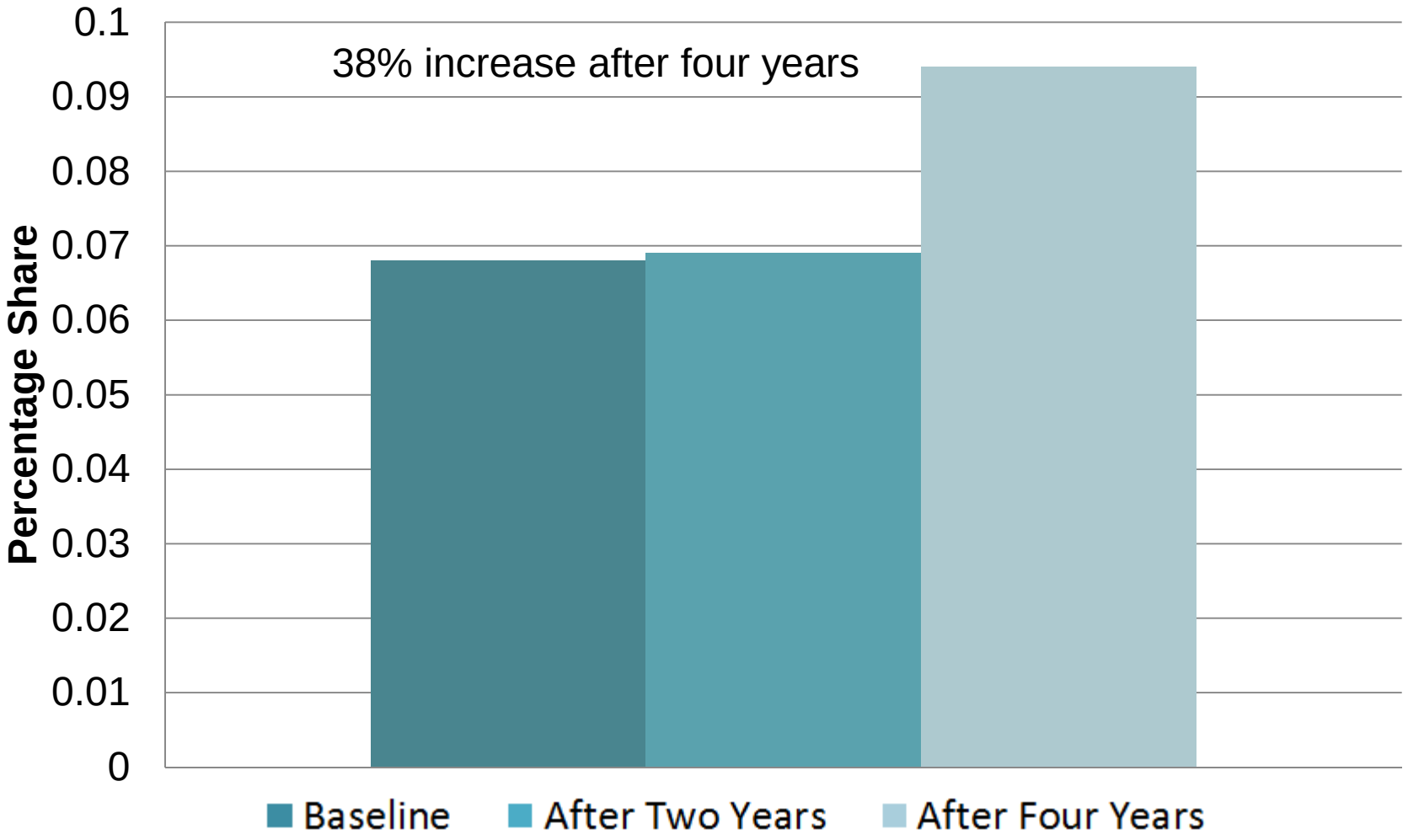
Program increases savings



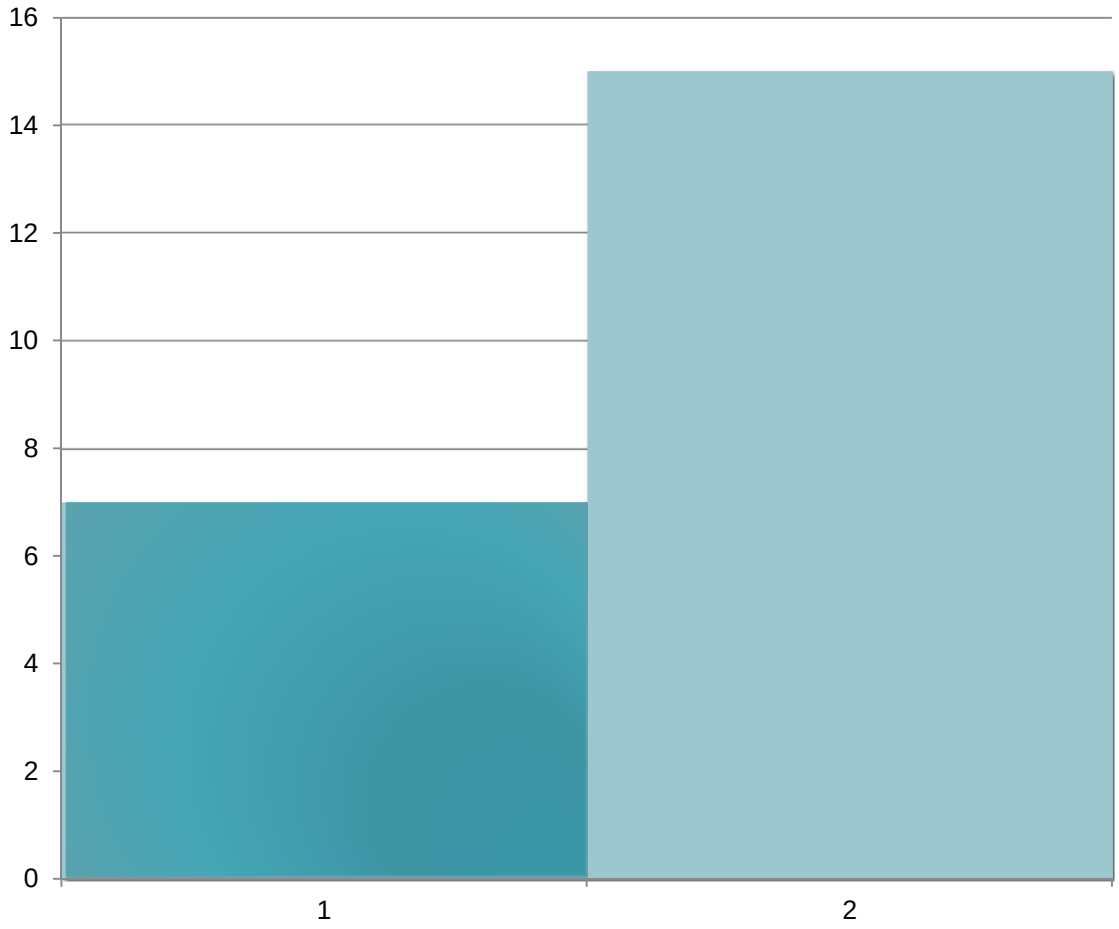
818% increase after two years

875% increase after four years

Program increases investment in land



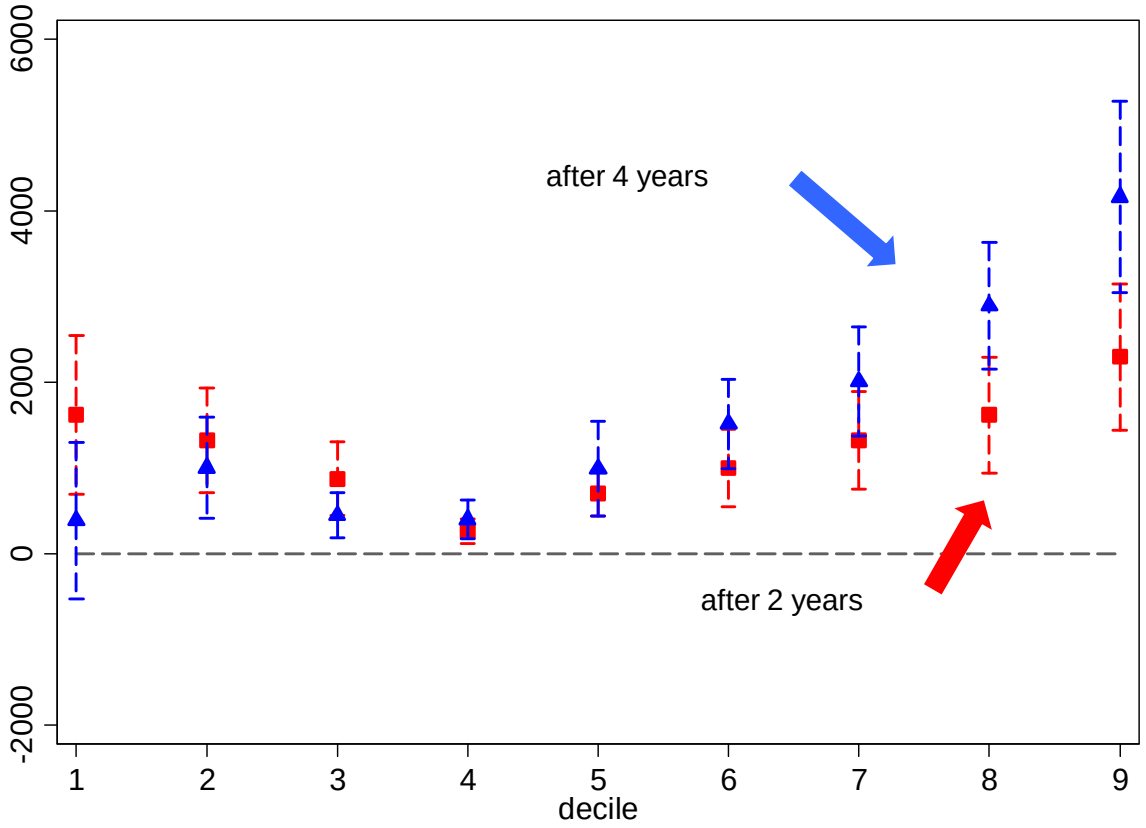
Program increases life satisfaction



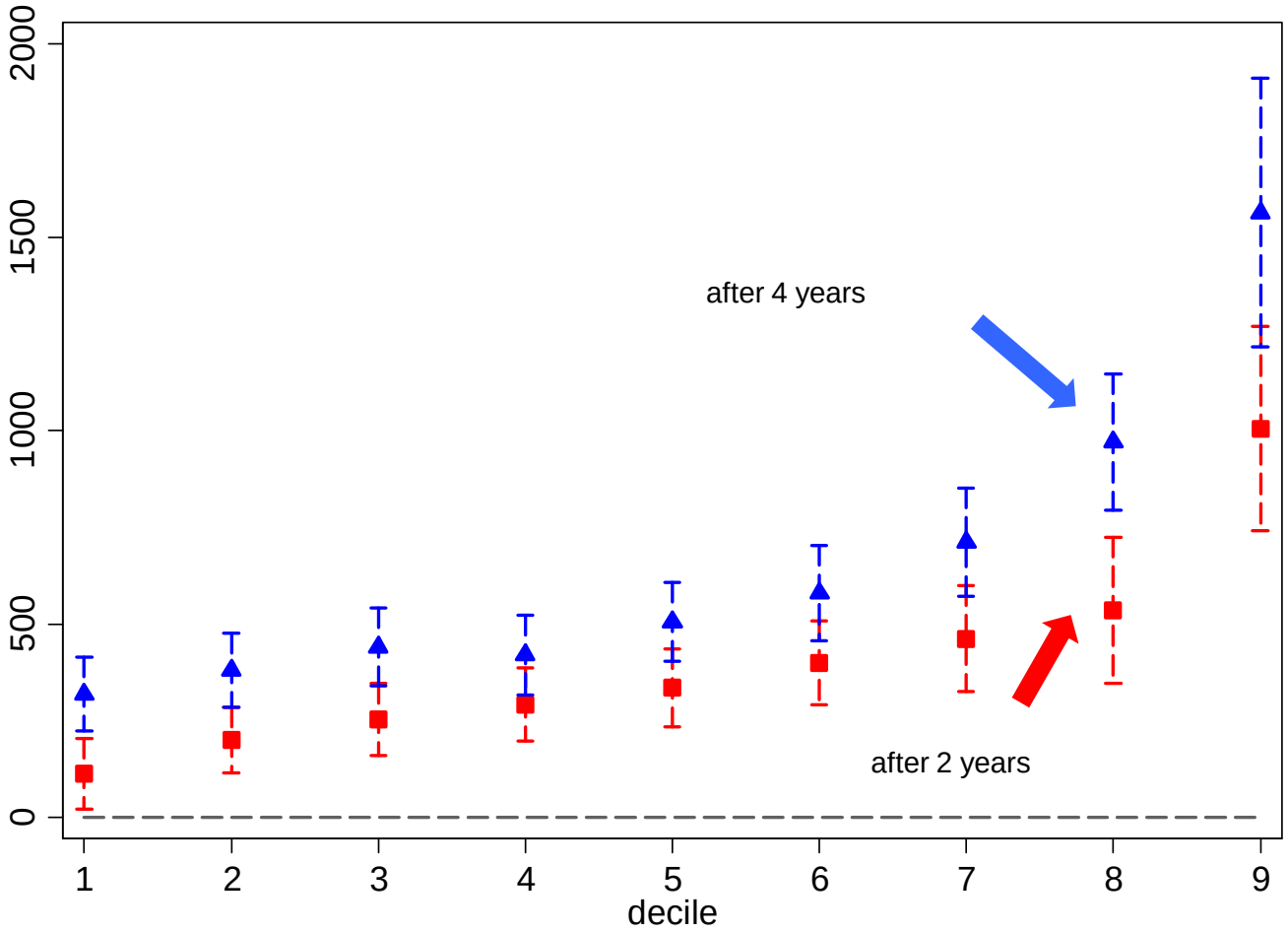
7% increase after two years

15% increase after four years

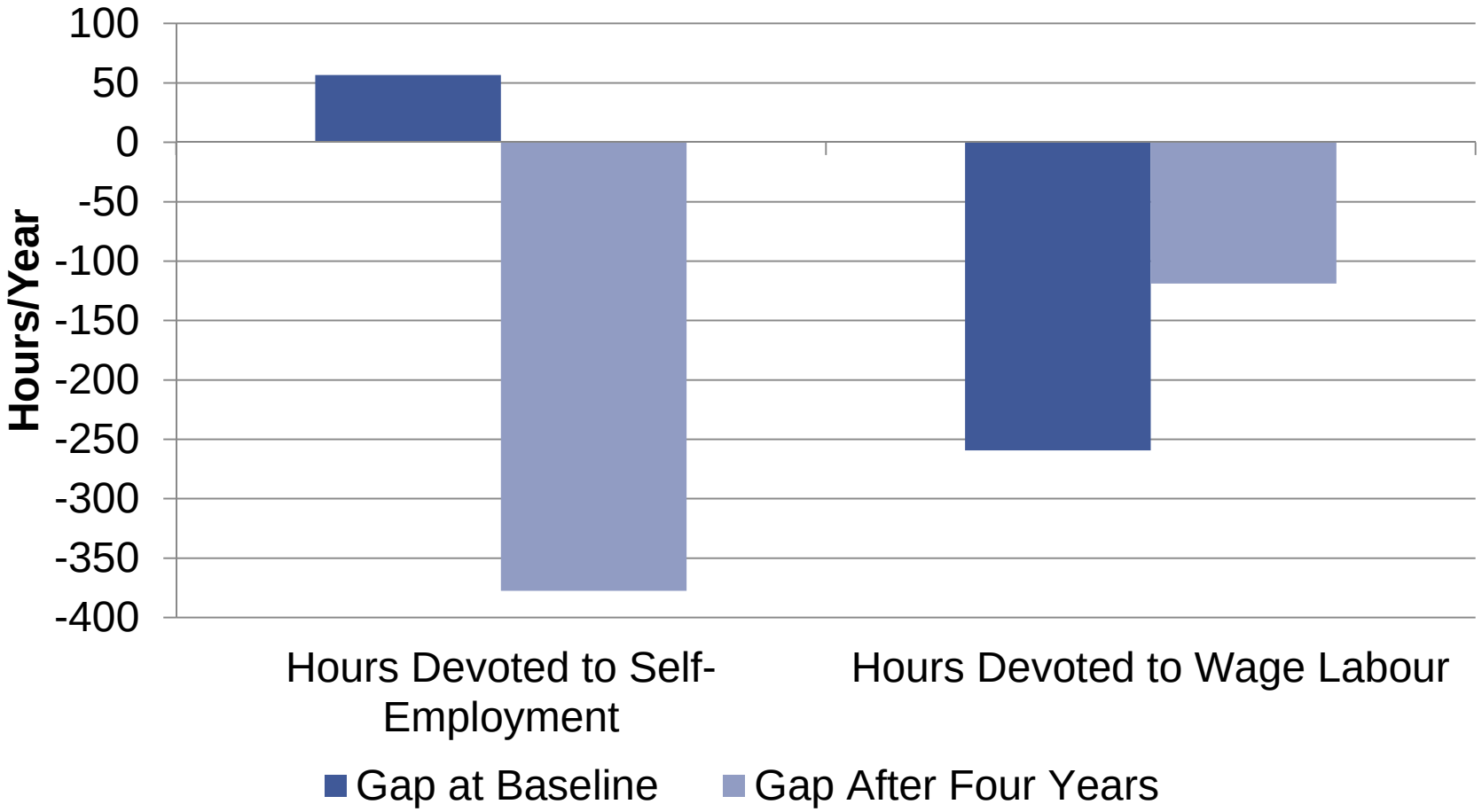
Nobody loses but income gains are uneven..



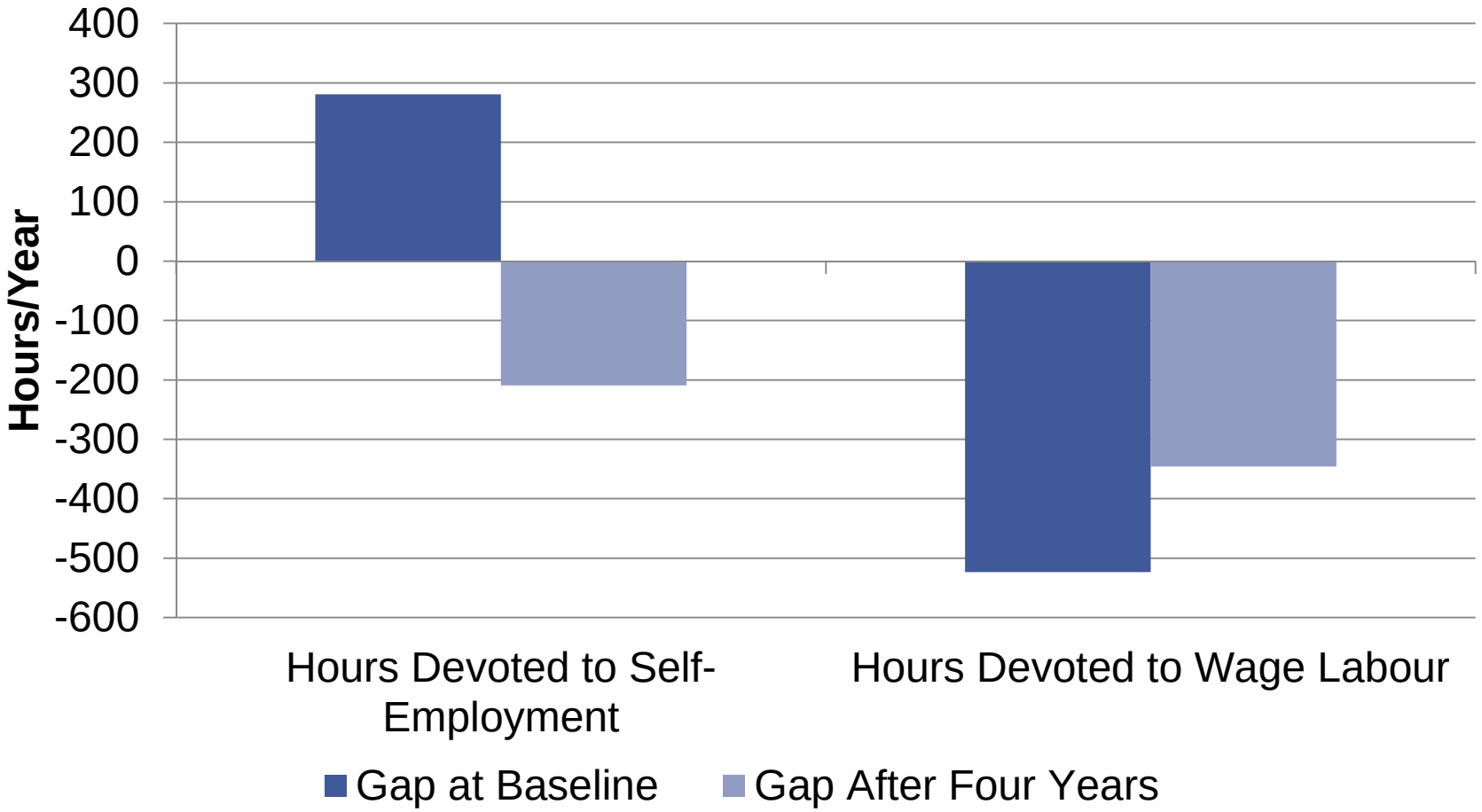
..and so are consumption gains



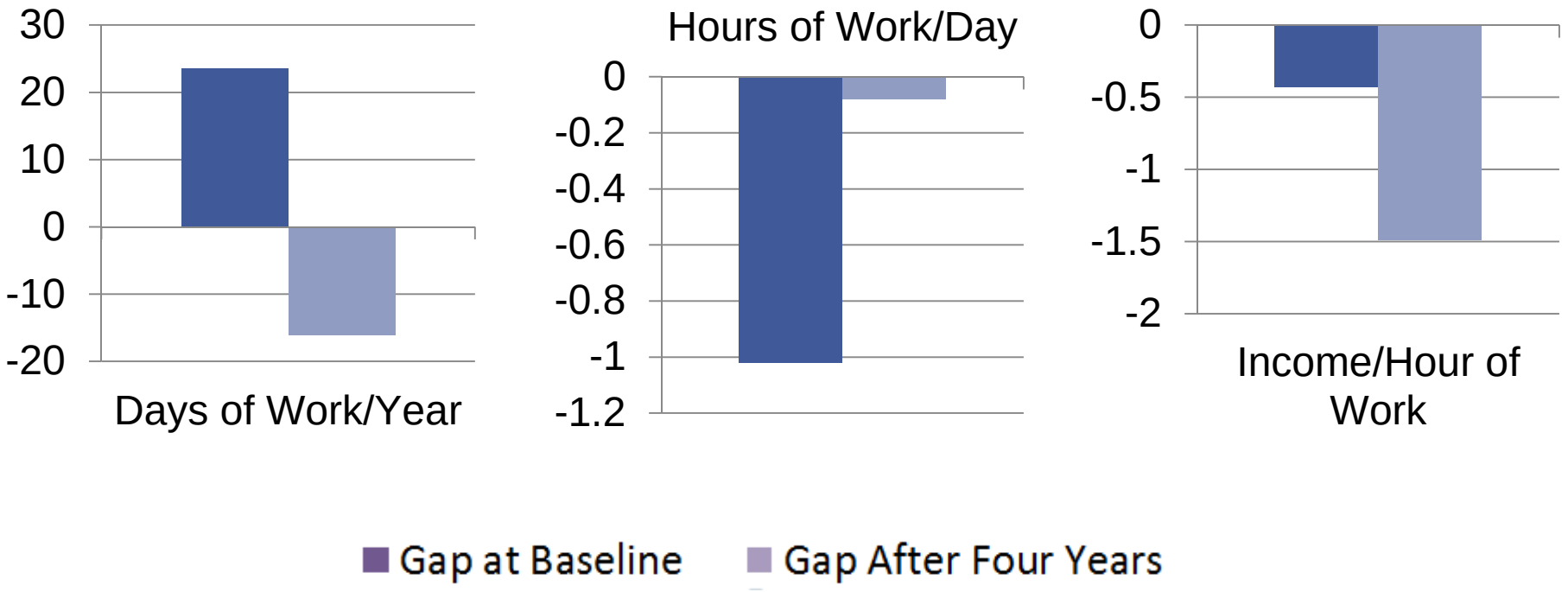
Closing the Gap with the Other Poor Occupational Choices



Closing the Gap with the Middle Class Occupational Choices



Closing the Gap with the Other Poor Occupational Traits



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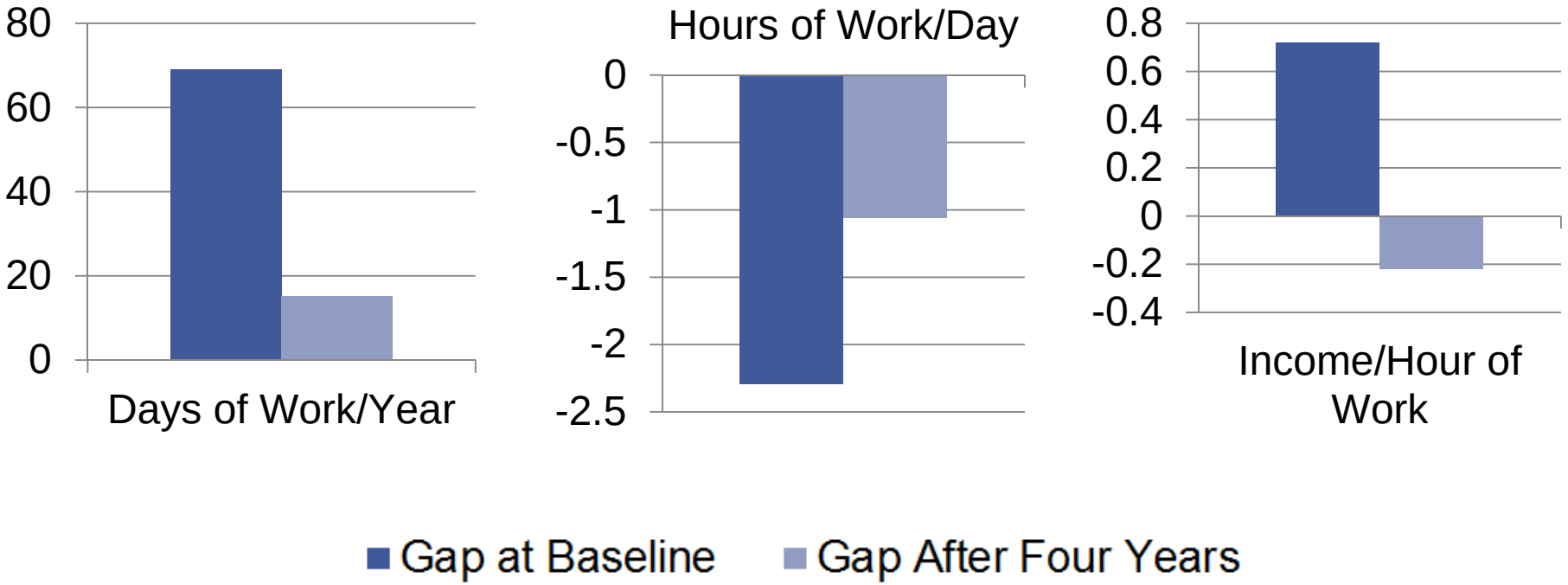
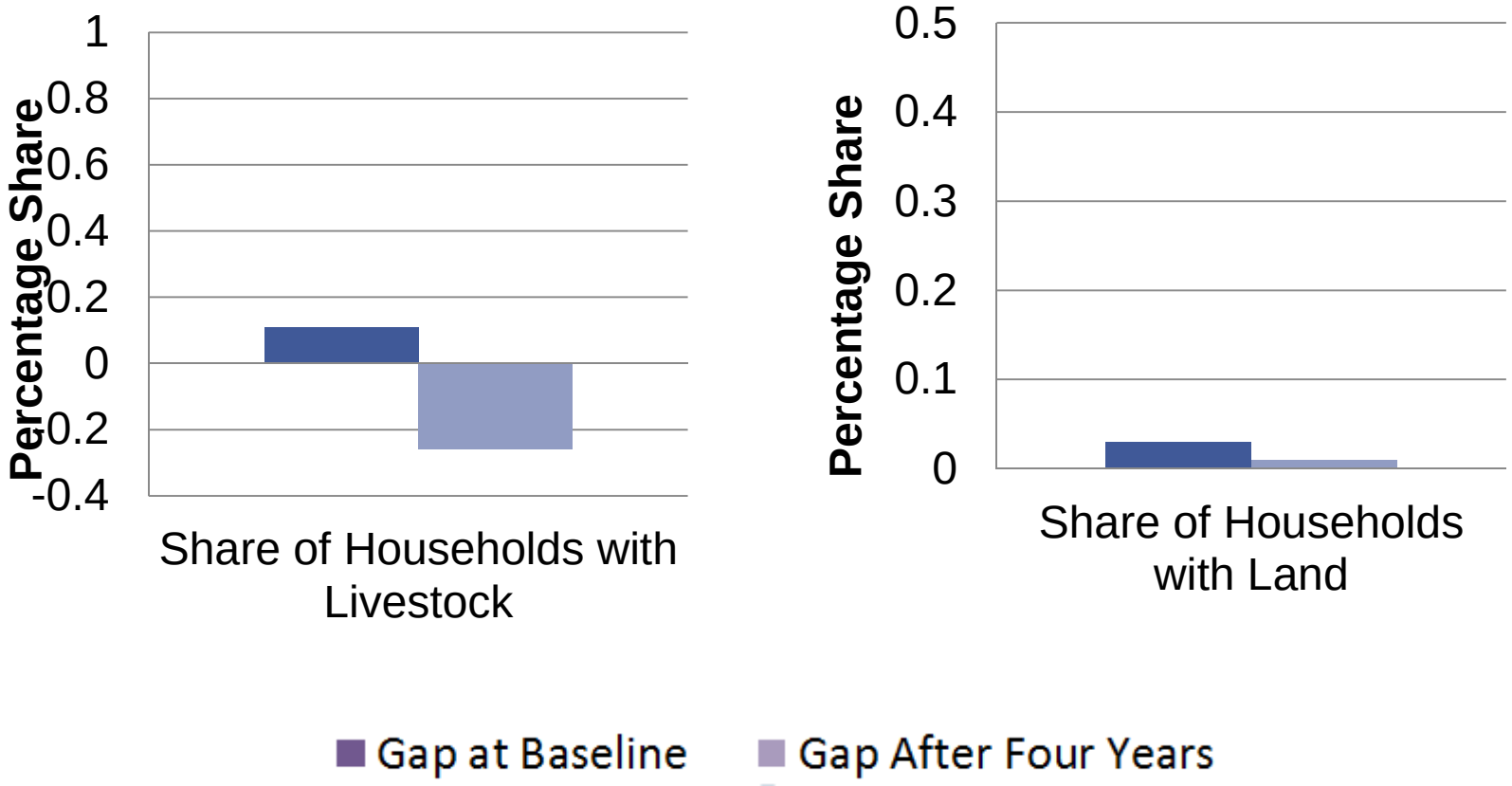


Closing the Gap with the Other Poor Productive Assets



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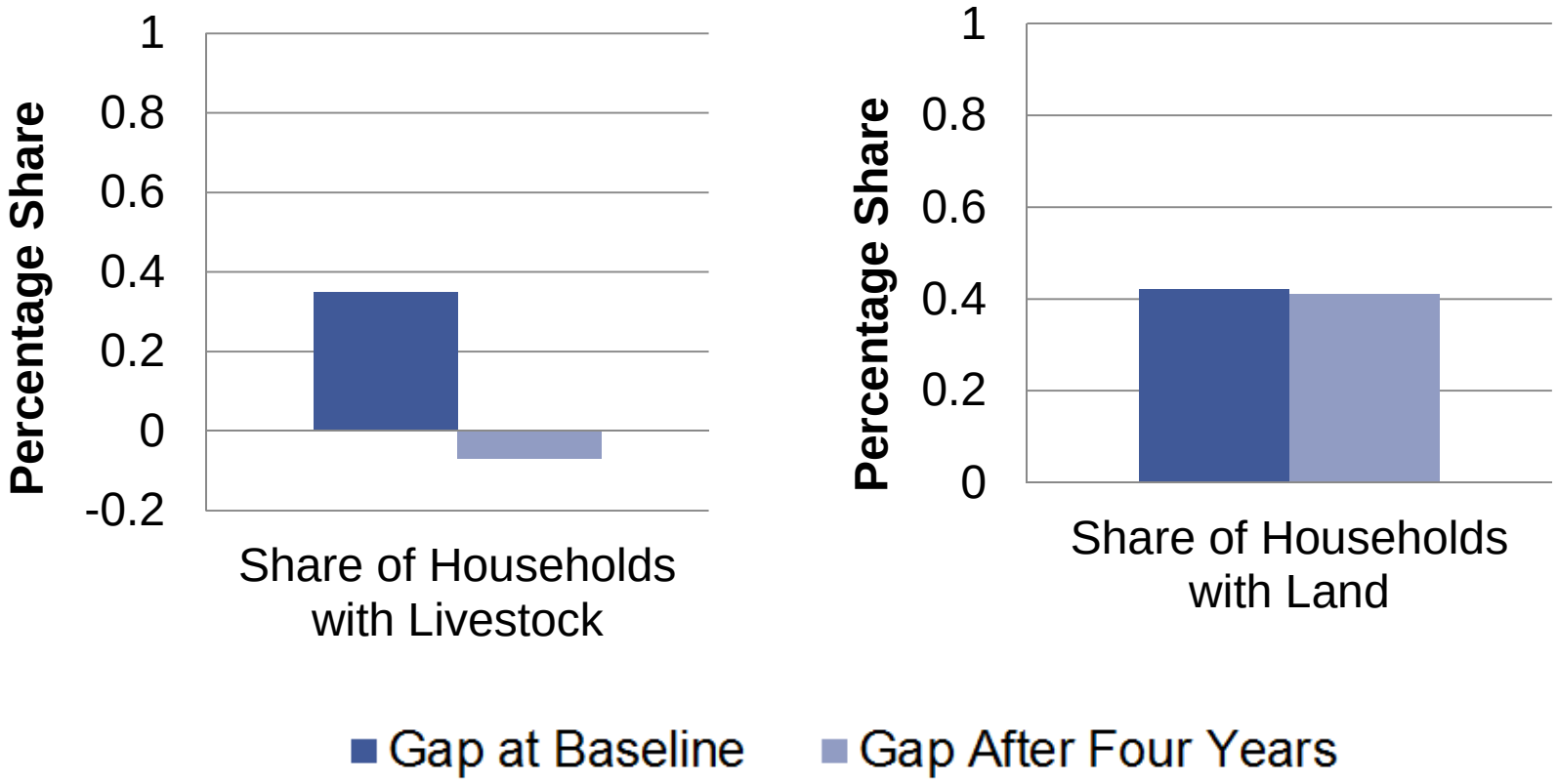
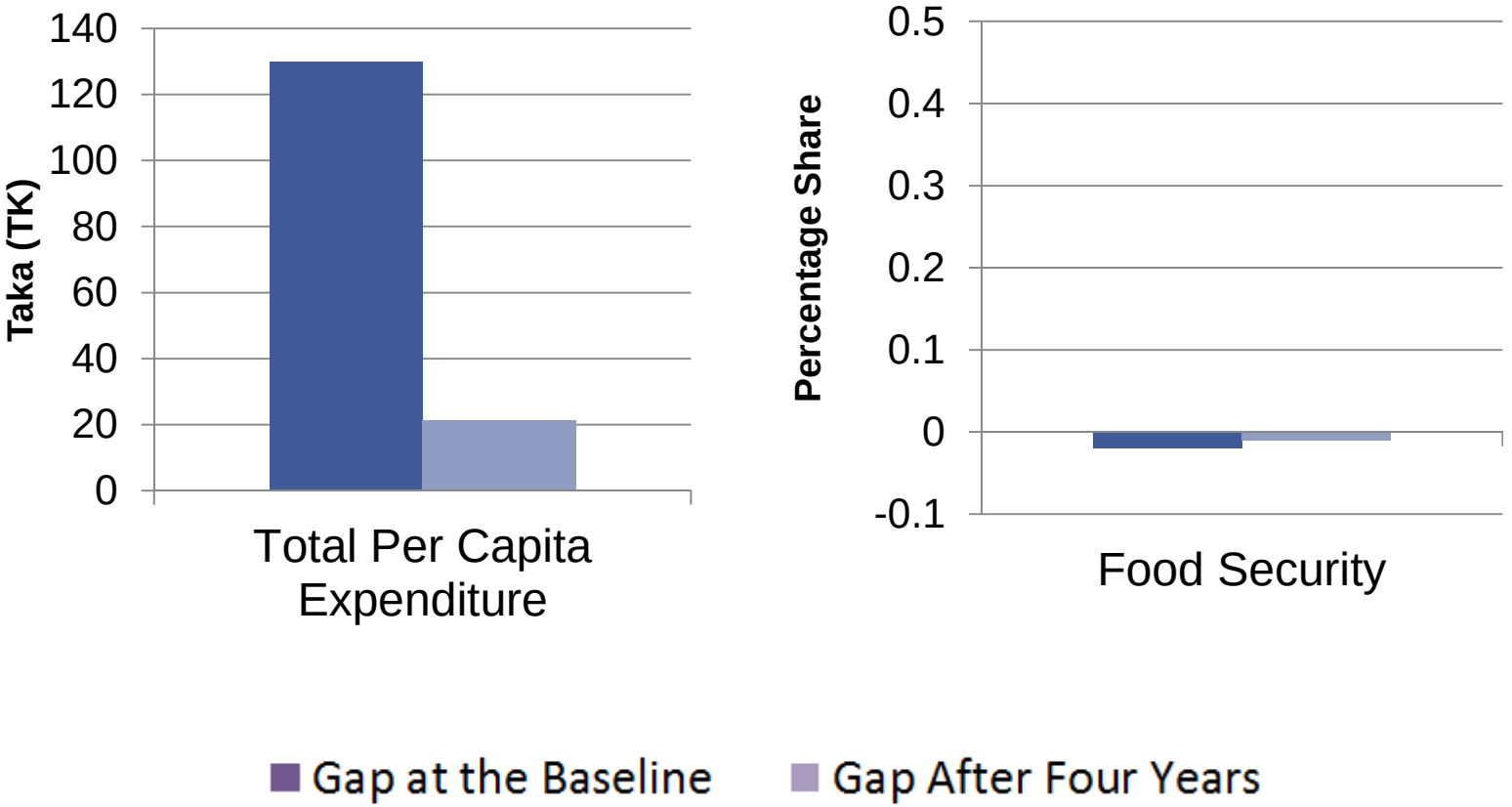


Closing the Gap with the Other Poor Poverty Indicators



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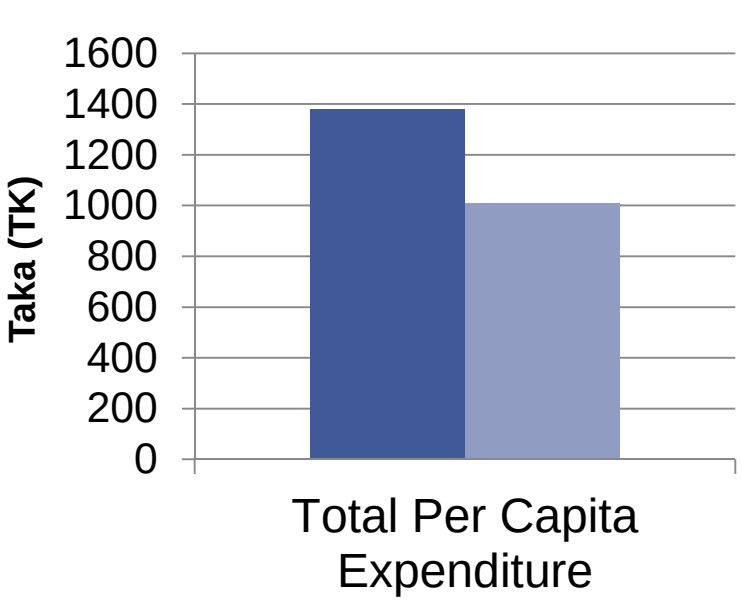

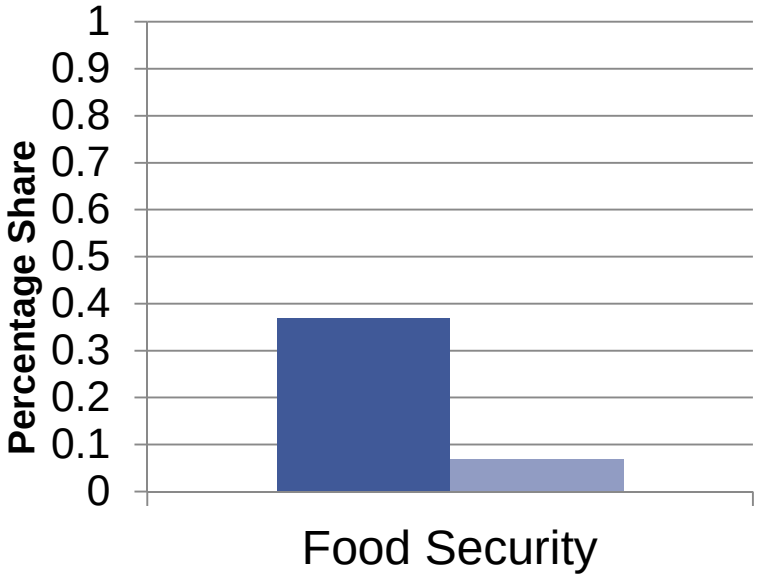

Gap at Baseline Gap After Four Years

Cost-benefit analysis- earnings

- Program costs 20,700TK per HH, yields 1754TK per year
- Useful to compare to cash transfer
- Requires assumption on counterfactual return to cash
  - possibly zero if cash is easier to consume or more difficult to protect from relatives
  - possibly higher if invested in individual specific “best activity” (if not present on the program’s long menu)
- Bank accounts are very rare in these communities (only 3.6% of sample HH, including the rich, have them)
- MFI accounts more common (17%)- return 4/5%
- 20,700 at 4.5% in real terms yields 700<1754

Cost-benefit analysis- utility

- Difference in utility might be higher or lower
- For given earnings, the program brings utility gains:
  - reduction in seasonality
  - more even allocation of hours across days
  - psychological boost of closing gaps with higher classes
- For given earnings, the program brings utility losses:
  - leisure hours fall by 219
- Utility gains and losses are difficult to quantify
- Making further (conservative) assumptions we can show that the program yields more utility than the cash transfer for at least 40% of the beneficiaries

Cost-benefit analysis- utility

- Worst case scenario: gains=0
- What's the value of 219 hours of leisure?
  - given seasonality of labor demand and binding asset constraints, observed wages/return to SE cannot be used to value leisure
- One possibility is to use QTE estimates to bound it
  - assume that those with lowest earnings are indifferent between the program and the status quo
  - assume that all beneficiaries have the same (additive) preferences over consumption and leisure
  - 219 hours are worth at most 370TK
  - assuming linear utility this implies that the program dominates a cash transfer for all beneficiaries whose earnings increase by more than 700+370=1070TK•
- Under these assumption, the program dominates a cash transfer for the average beneficiaries and all beneficiaries above the 6th decile

Lessons

- The program succeeds in transforming the occupational choices of the targeted poor
- Structural change: from wage labor to small businesses
  - compared to other (less successful) programs: massive asset transfer and intensive training
- Implication: capital and skills constraints drive the occupational choices of poor women in rural Bangladesh
- Change in occupational choice accompanied by increase in income, expenditure and food security
- Also of interest: education, health

Impacts on health and education

- Health:
  - Small increase in BMI
  - Reduction in the share of undernourished
  - Better self reported health
  - Large reduction infant mortality
- Nutrition:
  - Consume meat and fish more regularly
  - Spend less on cereals, more on proteins (meat, fish, dairy)
- Education:
  - enrollment stable (about 78%)
  - expenditure on education doubles