

Do Youth Disadvantaged Programs Pay off?: Evidence from Ghana and Colombia

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Roadmap

- Summary of results
- Methodological discussion
- How do the programs work and what is next?

Both papers evaluate impact of training

Ghana

Monk, Sandefur, and Teal (2008)

- 3 year Apprenticeships
- On the job training
- Ex-post evaluation
- Outcomes:
 - Earnings
- Differences by gender
- Diff. by level of education

Colombia

Attanasio, Kugler and Meghir (2009)

- 6 months vocational training
- In class and on the job training
- Randomized assigned
- Outcomes:
 - Earnings
 - Prob. of Employment
 - Tenure
- Differences by gender
- Diff. by formal status

Summary of results (as reported by authors)

Ghana

- ATT: 62% increase in earnings
 - Larger for those with no education (137%)
 - Lower for those with 10 years of education (58%)
- Differences by gender:
 - Higher returns for males than for females
 - But, not statistically significant

Colombia

- ITT:
 - 12 % increase in earnings
 - 6.8% increase in paid employment
 - Increase in prob. of employment in formal sector
 - Larger increase of earnings in formal sector
- Differences by gender:
 - Higher, statistically sig. returns for women. No effect for males
- Results associated to duration of internship

Methodological Issues: Ghana

- Main issue: endogeneity of treatment
- Authors implement a careful IV econometric strategy for both: education and apprenticeships
- Yet, it is always difficult to account for endogeneity;
- Coefficients are **almost never** statistically significant. Main effect is never significant.
 - Too small of a sample? (900 obs)
 - Large heterogeneity of impacts beyond education?
- Selection into employment: particularly for women

Methodological issues: Colombia

- Carefully executed random assignment (within training providers): reduces endogeneity concerns.
- In addition they use course fixed effects in all specifications

But:

- **Type of employment is not exogenous.** Results showing differences in salaries and probability of employment are very likely to be biased.
 - IV ?
 - Make use of longitudinal nature of data?
- **Gender differences:** Selection into employment (particularly for women).
 - Jointly estimate participation and earning equations?

Methodological issues: Colombia II

- Estimates of differences across formal and informal salaries: **why not estimate a model as follows:**

$$T_{ij} = \alpha R_i + \beta R_i * F + \gamma X_i + \epsilon_i$$

Instead of a model where the wages of informal are equal to zero or viceversa (it may be the same as above but it is not obvious to me)

Summary of results

Ghana

- ATT:
 - 62% increase in earnings ?
 - Larger for those with no education (137%) OK/?
 - Lower for those with 10 years of education (58%) OK/?

[Large but mostly not statistically significant results]

- Differences by gender:
 - Higher returns for males than for females ???
 - But, not statistically significant

Colombia

- ITT:
 - 12 % increase in earnings OK
 - 6.8% increase in paid employment OK
 - Increase in prob. of employment in formal sector ?
 - Larger increase of earnings in formal sector ?

- Differences by gender:
 - Higher, statistically sig. returns for women. No effect for males OK/?
- Results associated to duration of internship ?

Why do the programs work and how?

- **Value of skills:** general versus specific skills.
 - Are returns higher if certification?
 - If not certified: Are returns higher if workers are hired by same firms?
- **Screening:** Increased access to types of jobs that pay better but would not hire these workers without previous screening (unobservables)
 - Returns are higher only if hired by same firms that do training (observe unobservables)

Why do the programs work and how?

GHANA

Few details about the institutional set up and functioning of apprenticeships

- Is there an institutional support for apprenticeships, or they just happen through a master-trainee relationship?
- At the end of apprenticeships how skilled is a person relative to qualified person in that trade?
- Is there certification such that skills can be identified and valued by third parties? If so do returns vary by certification?
- Do returns vary by whether trainees are hired by same person/firm that trains them, by another firm, or whether trainees become self-employed?

Why do the programs work and how?

Colombia

- What do we know about the transfer of skills? Are students learning?
- Are returns to incomplete training much lower than returns to completed (& certified skills)?
- Would the returns be equal if rather than 3 months of in-classroom instruction students had six months of unpaid internship? [Substantially cheaper]
- Do returns vary depending on whether they are hired by same firm that provides on the job training?

Other issues that we would like to know

- Do gains from training depend on business cycle?
 - If firms are unwilling to hire workers, does training make workers more attractive?
- Displacement effects for non trained?
 - Is the labor market like a game of musical chairs (some get jobs and some don't and training helps some at the expense of others)?

Designing randomized trials to address these questions

- Randomize between in class & apprenticeship, and apprenticeship only.
- Collect information of actual skills attained at the end of the training experience (Sk)
- Collect information on whether workers get hired by same firms than train them or not (SF)
- Evaluate effect of Sk and SF in earnings and participation equations

Skills or unobservables ?

$$E_{it} = a + \alpha Sk_{it} + \beta SF_{it} + \gamma X_{it} + \varepsilon_{it}$$

Where Sk_{it} is equal to 0 if no treatment and equal to the attained training score if treatment.

Where SF_{it} is equal to 1 if hired by same firm that trains worker, and 0 otherwise (and 0 if no treatment).

A variation of this could be to add an interaction term of $SF_{it} * Formal_{it}$ to assess whether is the exposure to preferred jobs in a segmented market.

Business cycle?

- Examine returns to training in different labor markets:
 - Interact $R_{it} * U_{jt}$

Where U_{jt} is the unemployment rate of geographical unit j

Finally...

- **Long term returns:** Design follow up rounds to assess whether returns to training are permanent or quickly fade overtime
- **Training vs. schooling:** Examine cost effectiveness of training versus efforts to bring drop outs back to school



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