Out of pocket education expenditure and household budget: Evidence from MENA countries

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Outline

• Motivation
• Knowledge gap
• Data and methods
• Results
• Conclusions and policy recommendations
Motivation

Education is considered the powerful force that can shape the future of the Arab countries.

- Education has a positive spill-over effect in speeding up economic growth; improve income distribution and social mobility.

- Education affects the quality of life of citizens by contributing to longer life expectancy and lower fertility rates and cohesive national identity.
Investment in education could come from two different domains: public investment and household investment.

- Much attention has been given to public spending on education and its impact on economic growth and poverty reduction.
- There is very limited database on household expenditure on education particularly in MENA countries.

**Challenge:**

- Ignoring the quantum of household expenditure on education and its determinants especially in MENA countries.
  - Free education policy that is adopted since mid 20th century as a part of social contract.
Objective of the project

- **First**: to analyze the pattern of household expenditure on off-spring’s education by family characteristics such as:
  - Household income;
  - Educational / occupational level of parents
  - Location of household
- **Second**: calculate the income elasticity of household expenditure on education for each country.
- **Finally**: Are there any signals of rewards to education send by the labour market to educators and their families at different level of education in MENA countries.
Research questions

• To what extent the amount of household income affects the demand on education in MENA countries.

• What are the patterns of household education expenditures in MENA countries? To what extent it differs by changing household characteristics?

• What are the various factors that determine household expenditure on education in Arab countries? Do they differ from one country to another in the region? And Why?

• Are there any signals of rewards to education send by the labour market to educators and their families at different level of education in MENA countries.

• What are the best regulatory policies governments’ needs to impose to improve education in the region?
Literature Review

- The relation between public spending and household spending
  - Substitute (Israel) or complementary (India)
- Household Income is crucial for determining spending on education
  - Japan (income elasticity is high for middle income families and negative for the top income families and do not fall to zero for the poorest families.)
  - Greece/Bolivia (more educated and high income spend more on education)
- Mixed results found for ROE for the MENA region
  - Primary / Tertiary
The paper makes use of Household Income, Expenditure and Consumption Surveys (HICES) for a group of MENA countries.

The dataset used for this paper are the 2010/2011 round for Egypt, Jordan and Palestine. Besides, the 2009 round of HICES is used for Sudan.

The HICES data are nationally representative samples collected by the national statistical agencies of the selected countries.
Countries

• Egypt
• Palestine
• Sudan
• Jordan
The landscape in Arab countries

- **Egypt**
  - Public education is free for all and this is applied for all schooling level and funded by the government.

- **Palestine**
  - Funding education comes from the government budget through ministry of finance, while the remaining part comes from donors and international organizations.
  - There are 11 universities in West Bank and Gaza, 10 of them are private and one is public.

- **Jordan**
  - Schooling is free at compulsory levels as well as secondary only in public schools.

- **Sudan**
  - Education is free only at primary level of schooling
Average public spending on education as % of GDP in MENA over the period (2000-2013)
Enrollment rates as % of gross enrolment in MENA by educational level in 2011
Public spending on education in MENA 2015

- Egypt: 4.4
- Tunisia: 5.9
- Sudan: 2.2
- Jordan: 4.2
- Algeria: 4.5
- Morocco: 5.2
- Israel: 5.4
- Turkey: 2.6

Public expenditure as % of GDP
Share of education spending out of household budget (income quintile)

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Household education spending as % of household income by educational level

- Jordan: Pre-Primary 0.7, Secondary 2.3, Tertiary 17.6
- Palestine: Pre-Primary 2.4, Secondary 1.2, Tertiary 9.7
- Sudan: Pre-Primary 4.9, Secondary 7.1, Tertiary 13.2
- Egypt: Pre-Primary 1.7, Secondary 2.2, Tertiary 0.6
Household Education Spending as % of household income, by Level and Household Income
Income elasticity of education expenditure

- Egypt: 1.5
- Jordan: 1.0
- Palestine: 0.4
- Sudan: 0.6
Estimate ROE

- Examining the ROR on education in Arab countries is very limited.
  - The variation exists across countries due to many reasons:
    - Labour market institutions
    - Quality of education and
    - Supply and demand among university degree graduates.
  - We attempt to apply Standard and extended Mincerian model to estimate the rate of return on education and to show to what extent the results are sensitive on the approach implemented.
Predicted rate of return to years of schooling

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Predicted rate of return to education adjusting for occupation and region

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EGYPT  PALESTINE  SUDAN  TUNISIA
## Predicted ROE by education level

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## ROE by occupation and region

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Key Findings (1/3)

- Understanding the determinants of spending on schooling in Arab countries is considered very crucial since mid 20th century.
  - where, free access to education is adopted extensively as an important part of social contract.
  - Households spend sizeable amounts of income on educating their children but the magnitude varies across Arab countries at all educational levels.
Key Findings (2/3)

- Parents belong to low social class are found to spend more on children’s education compared to those at the highest social class, with exception in Egypt where wealthier households are spending more on children’s education.
- Parents with children’s at college level are found to spend more on education compared to other educational levels except Egypt.
  - This confirmed the importance of education to lower socio-economic background households as a mean for economic and social mobility.
Key Findings (3/3)

- The place of residence of household is an important factor in determining household expenditure on education.
- The more developed regions in the country are found to spend more on educating their children compared rural regions.
Potential Policy Implications

- Is free education policy a reality or myth for Egypt?
  
  • Free education policy is first introduced in the early 1960’s and have been entirely undermined.
  • A policy designed to achieve equality of opportunity in access to education, has resulted in a situation of extreme inequity in access to education in Egypt.
  • The end result, however, is the expenditure of significant public resources on higher education exclusively benefit the better-off group.
Potential Policy Implications

- A new policy is needed and the basic principle of such policy
  - Public support of higher education should be targeted the group that needs public assistance and more able group should pay their own way.
  - Number of merit-based scholarships for the best performing students need to be designed on the basis of the need.

- Challenge
  - The ability of the government to determine the most deserving group and then designing a system of targeted educational scholarships and subsidized loans
Future Directions

- Another quick solution
- Implications of private tutoring on household’s budget in MENA region
- Any other ideas welcomed!
Thank you very much

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