Fiscal Space and Public Spending on Children in Burkina Faso

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The **2000 to 2008 period** is characterized by an *important economic growth* rate (close to 5%), but strongly tempered by *high annual population growth*.

**Burkina Faso** remains a **poor country** and is very far behind in terms of infrastructure and human development.

**Child poverty** is an enormous *social and economic loss* because it has long term (and often irreversible) effects on individuals and their future children.

Despite commendable efforts since 2000, the government recognizes the need for a **stronger commitment** to achieve the Millennium Development Objectives (MDGs), particularly to **reduce poverty** by 2015.
Public social spending, in education, health, nutrition, or other areas, has an undeniable impact on child wellbeing and, in the longer run, on the social and economic development of a country.

At the same time, budget deficit has grown in recent years, in response to various crises which have hit the country.

There are strong pressures to rapidly reduce this budget deficit, but there are active concerns about how this will be achieved.
Reducing public spending that is largely focused on children may have negative consequences on their current level of wellbeing, on attainment of the MDGs, and thus on the economy of Burkina Faso in the longer term.

The country thus finds itself faced with difficult choices: how will it ensure improved living conditions for children, attain the millennium objectives and ensure a better future in such a budgetary context?

Strong analytical tools become crucial to policy makers in order to help them in establishing priorities (social and economic) under financial and fiscal constraints.
Objective

The goal of this study is to evaluate the impacts of public policies:

• Increase in education spending
• School fees subsidy
• Cash transfer to households with children under the age of five

On:

• Children rates of poverty
• Their school participation
• Economic growth
Methodology and Data

**Model:**
- integrated macro-micro framework

**Data:**
- Macro: social accounting matrix (SAM) for 2009
- Micro: 2009 household living conditions survey (EICVM)
Methodology and Data: Macro

**Model:**
- Dynamic computable general equilibrium

**Specificities:**
- MDG module that allows:
  - Taking into account current and investment social spending and their funding
  - Their impact on MDGs achievement

**Main output:**
- Impact on **prices** (wages, consumer and producer prices, education fees, ...) and on **quantities** (employment, sectoral value added, number of students, ...) which are then used in the micro model
- Impact on **education** (entry and participation rates, number of students per cycle, ...) and on the **economy** (growth, fiscality, ...)
Methodology and Data: Micro

Model:
• Dynamic micro-simulation model

Use:
• Estimate behavior elasticities (household consumption, education, mortality)
  • Used in the macro model
• Define the new sample of skilled and unskilled workers at each period
• Estimate variation in income for each household and their new real consumption

Main output:
• Incidence of monetary and caloric poverty among children
Methodology and Data

The models evaluate **5 educational behaviors:**

- Entry rate
- Graduation rate
- Repetition rate
- Dropout rate
- Transition rate

These behaviors are influenced by:

- Education quality
- Education infrastructure
- Other infrastructures
- Relative wage
- Level of health of children
- Education fees
- Per capita consumption
Scenarios

Simulation period:

• 2009 to 2033

Scenarios:

• **Reference** (BAU, without intervention): constructed using IMF forecasts (increases in exports, reduced deficit-to-GDP ratio, …)

• **Simulations**:
  1. **Increase in current education spending** (for 2010 = 25% increase)
  2. **School fees subsidy** (for 2010 = 24,501 FCFA per student)
  3. **Cash transfer to households** with children aged 0-5 years (for 2010 – 17,283 FCFA per child aged 0-5 years)

• Same amount injected

• **Temporary measures** for the 2010-2019 period
Scenarios (2)

Financing mechanisms:

1. Reduced **subsidies**
2. Higher **collection rate** of indirect taxes
3. Extending the public **deficit** reduction over ten years rather than five
Results and Discussion

**Intervention:**
- Increase in current education spending

**Financing mechanisms:**
- Reduced subsidies, higher collection rate, extending the public deficit reduction

**Impact on:**
- Education, economy, poverty
Results and Discussion: Education

↑ public spending in education:
→ ↑ education quality index
→ ↑ entry rate and ↓ dropout rate
→ ↑ net participation rate (up to 5 percentage points)

The end of the program has a temporary negative impact on the various participation rates; but these are slightly higher than they would have otherwise been in the long run.
Results and Discussion: Education

↑education spending:
→ induces further studies at the second level, where the number of students increased markedly (17 percent higher than in the reference scenario)
Results and Discussion: Economy

↑ education spending:
→ ↑ number of skilled workers by more than 50 000 (to more than 2% above the reference level)
→ Worker’s level of education rises.
Results and Discussion: Economy

↑ education spending:

→ **Limited impact on GDP** (it is assumed that responsibility for the financing mechanisms is taken on by the economy of Burkina Faso – reallocation within the economy)
→ **Slight reduction** in real GDP up until the students pursuing their studies join the labor market
Results and Discussion: Children Poverty

In the long run, all poverty indicators decline markedly in the reference scenario.

↑ public education spending
→ ↓ monetary and caloric poverty, particularly during the intervention period, but only if this spending is financed by an increase in the deficit.
Results and Discussion

**Intervention:**

- Increase in current education spending, school fees, cash transfer to households

**Financing mechanisms:**

- Extending the public deficit reduction

**Impact on:**

- Education, economy, poverty
Results and Discussion: Education

“Spending”: improvement due to ↑ education quality index

“sub”: positive impact on the entry rate but negative impact on the education quality index (increased number of students, constant volume of educational services)

“transfers”: no significant impact (low elasticity for per capita consumption)
Results and Discussion: Education

Indicator of number of students per cycle (reference = 100)

"sub": ↓ education quality index
→ ↑ dropout rate
→ ↓ transition rate
→ ↓ number of students in the second level
Results and Discussion: Economy

“Spending”: Only an increase in public education spending increases the supply of skilled workers.
Results and Discussion: Children Poverty

In the short and medium run, the cash transfer is the intervention that leads to the greatest reduction in poverty.
## Conclusion

### Intervention:

**Increase public spending in education:**
- → ↑ school participation and graduation rates
- → ↑ supply and education level of skilled workers
- → ↓ poverty

**School fees subsidies:**
- → ↑ entry rate but less incentives to pursue education
- → Slight ↑ supply of skilled workers, but ↓ education level
- → ↓ poverty (more than “Spending”, less than “Transfer”)

**Cash transfers:**
- → Limited impact on education and labor supply
- → Significant ↓ poverty
Conclusion

Financing mechanism:

Overall, the results are **qualitatively similar** regardless of the financing approach.

However, financing the state interventions through a reduction in **subsidies** or improved **tax collection** would have **negative impacts on poverty**, because these measures increase the price level.
Recommendations

If the objective is to achieve better performance in:

Education and economy
   → Increased public spending in education

Wellbeing
   → Cash transfers to households

Regardless of the intervention being considered, the most suitable financing mechanism appears to be a temporary increase in the public deficit.