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partnership for economic policy

Fiscal Space And Public Spending on Children in Burkina Faso

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Context

The **2000 to 2008** period is characterized by an **impotant 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 (**MDG**s), particularly to **reduce poverty** by 2015.

Context (2)

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.

Context (3)

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 find 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 od 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 children 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

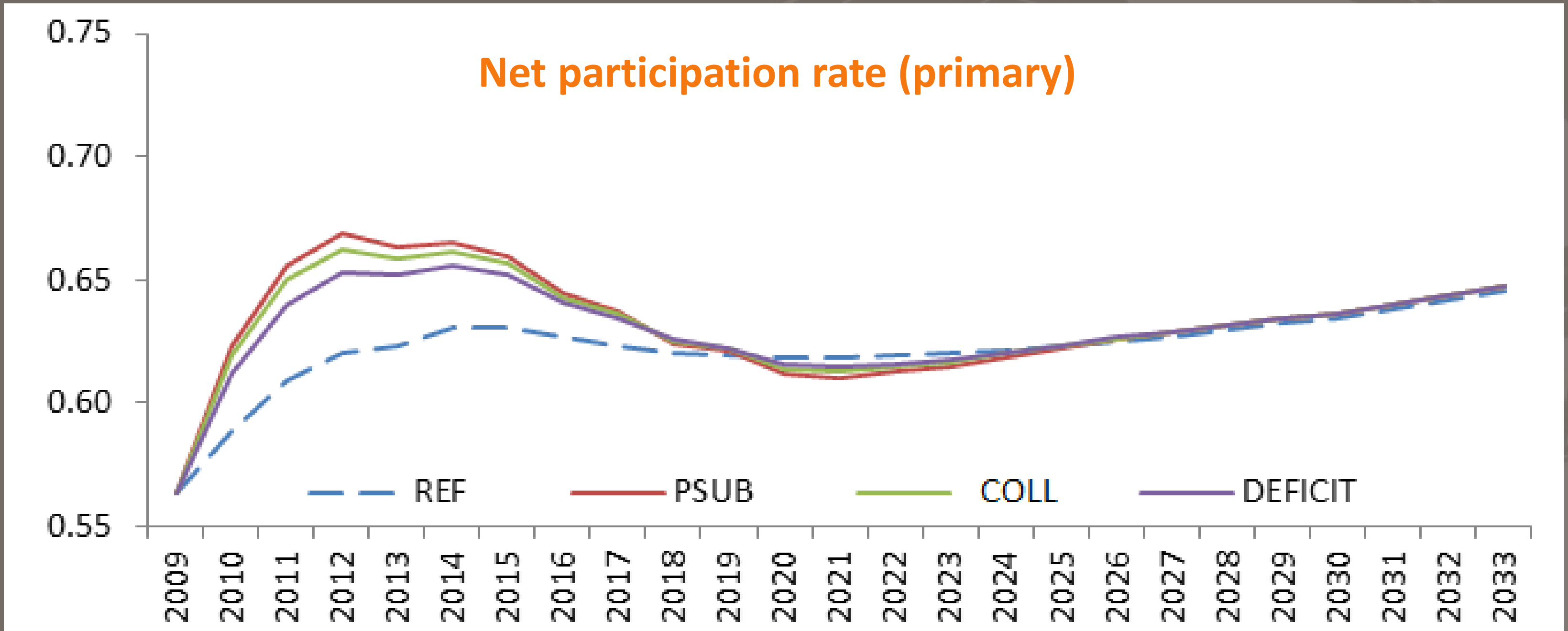
Financing mechanisms:

- Reduced subsidies, higher collection rate, extending the public deficit reduction

Impact on:

- Education, economy, poverty

Results and Discussion: Education



↑public spending in education:

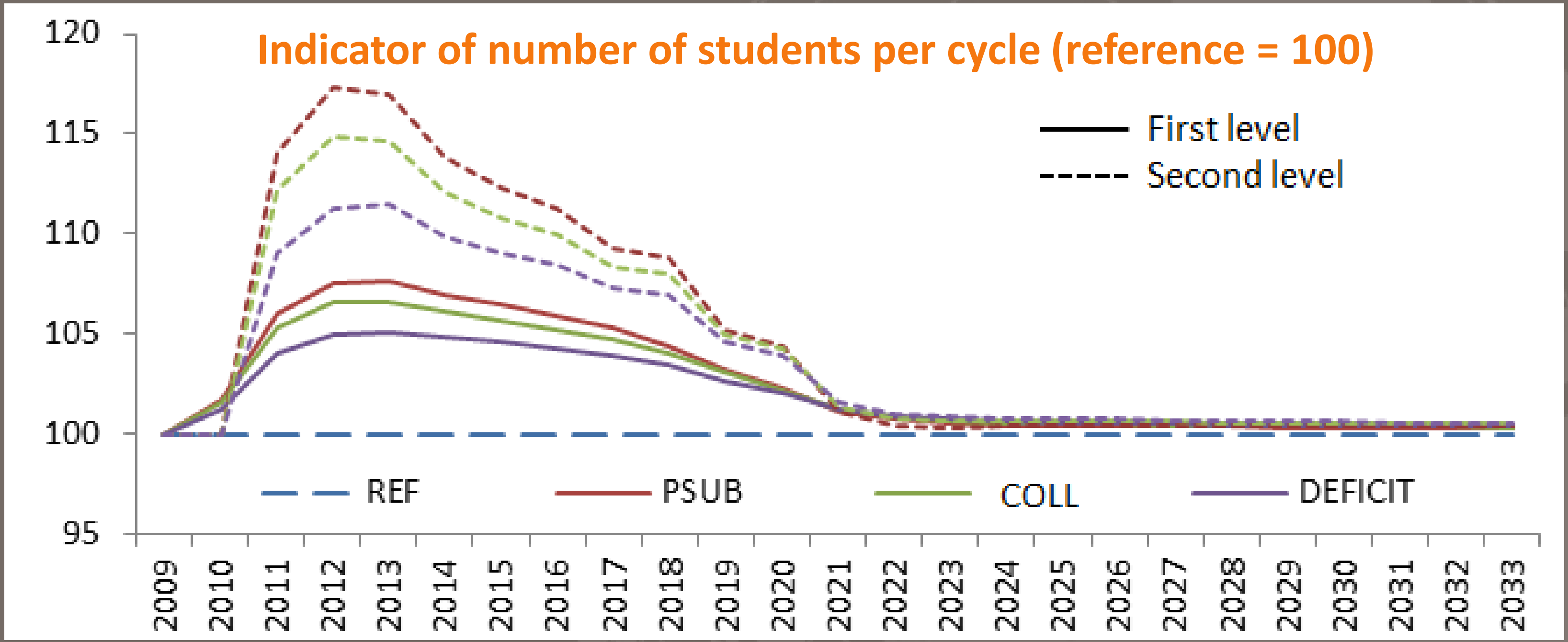
→ ↑education quality index

→ ↑ 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.

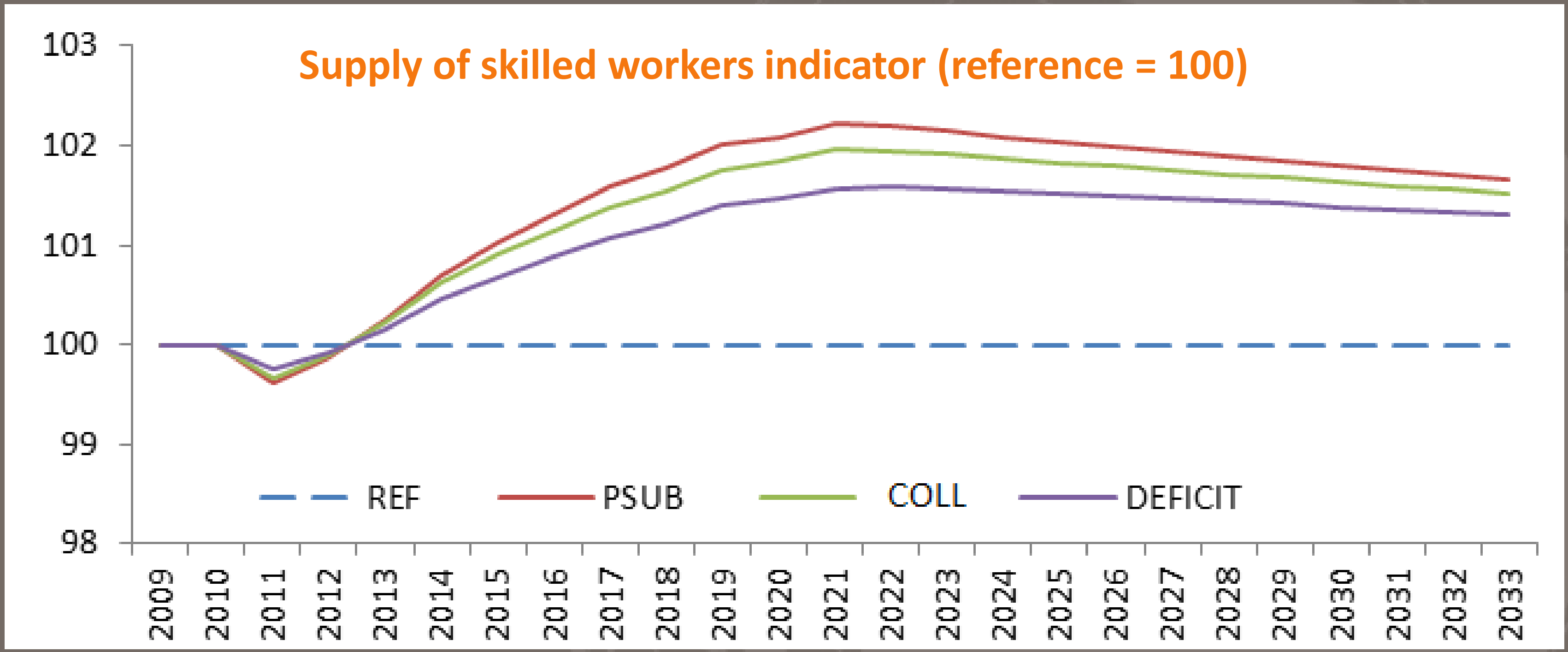
Results and Discussion: Education



↑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

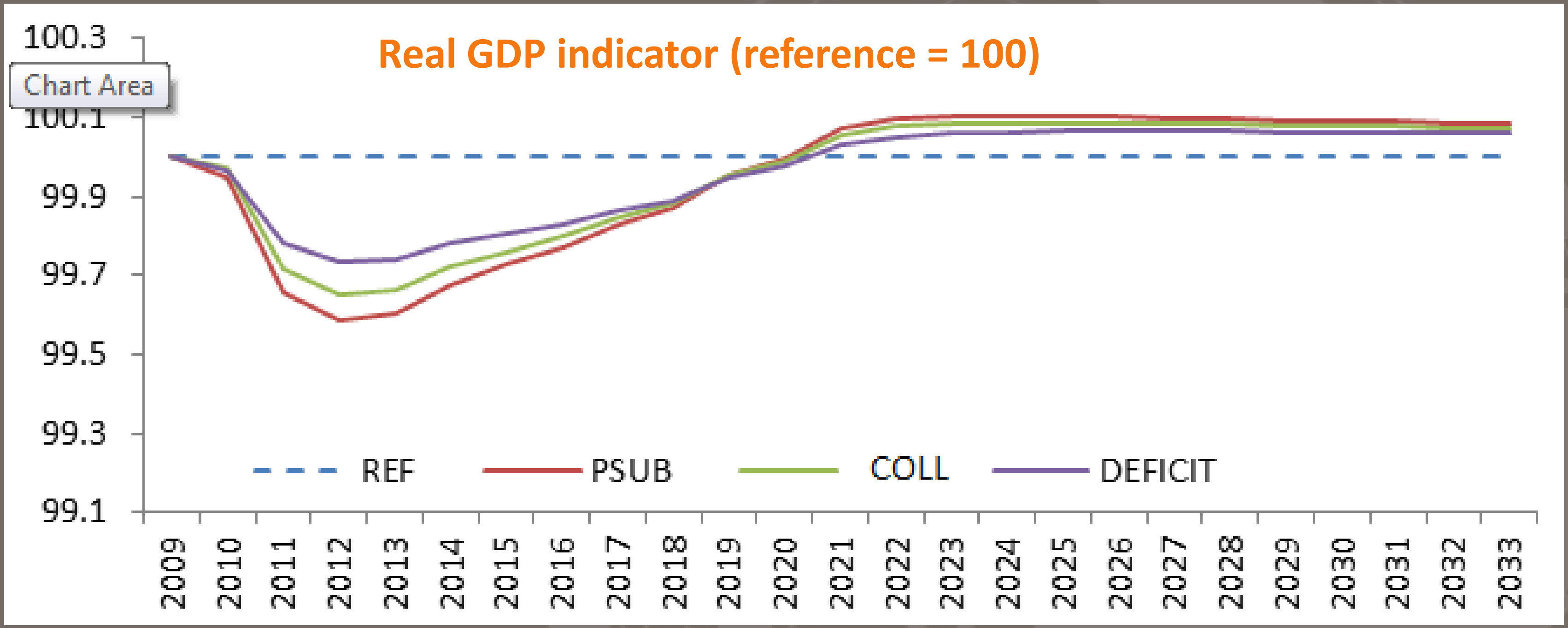


↑ education spending:

→ ↑ 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**)

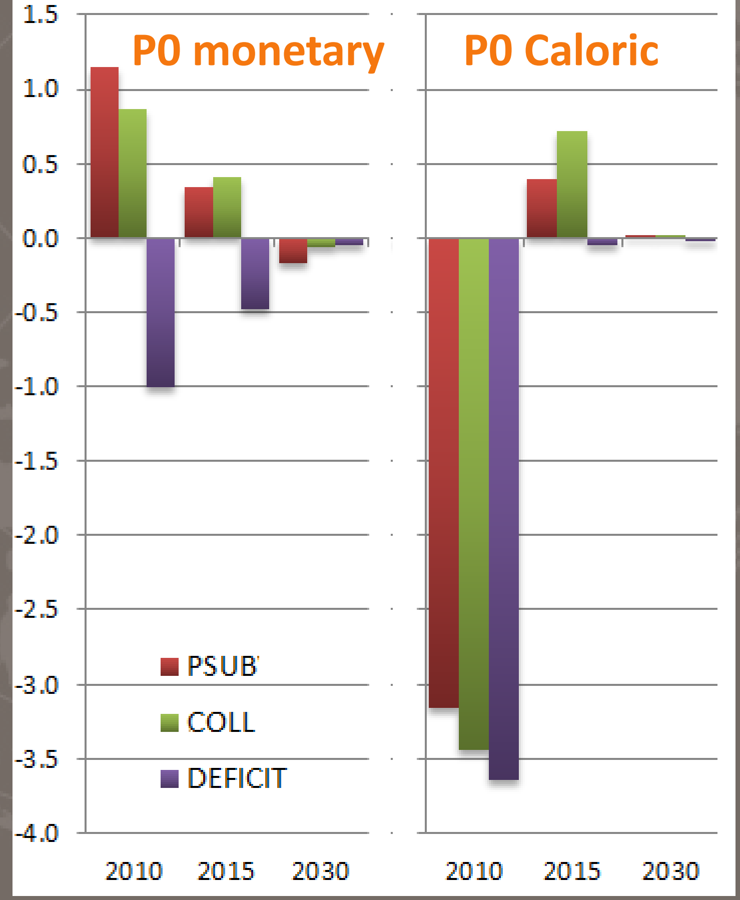
→ **Slight reduction** in real GDP up **until** the **students** pursuing their studies **join the labor market**.

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**.

Variation (in percentage points) of poverty indicators with respect to reference scenario



Results and Discussion

Intervention:

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

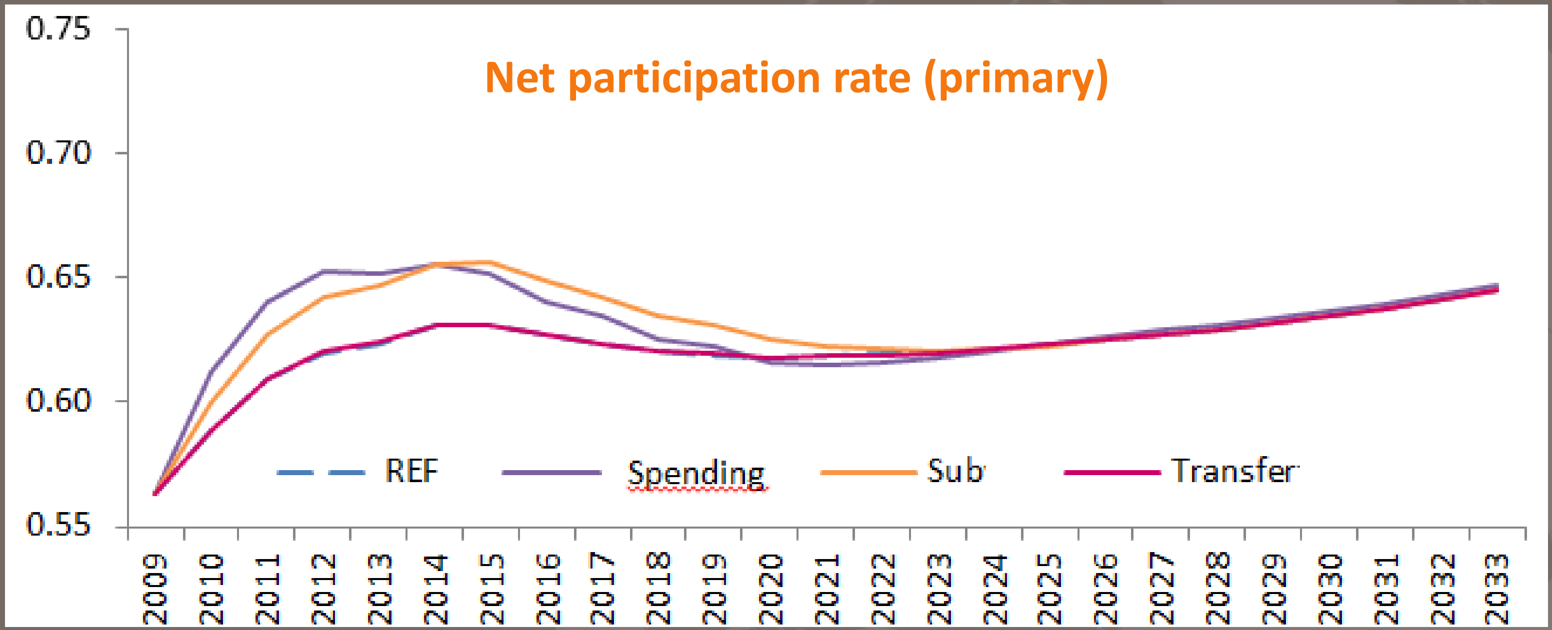
Financing mechanisms:

- Extending the public deficit reduction

Impact on:

- Education, economy, poverty

Results and Discussion: Education

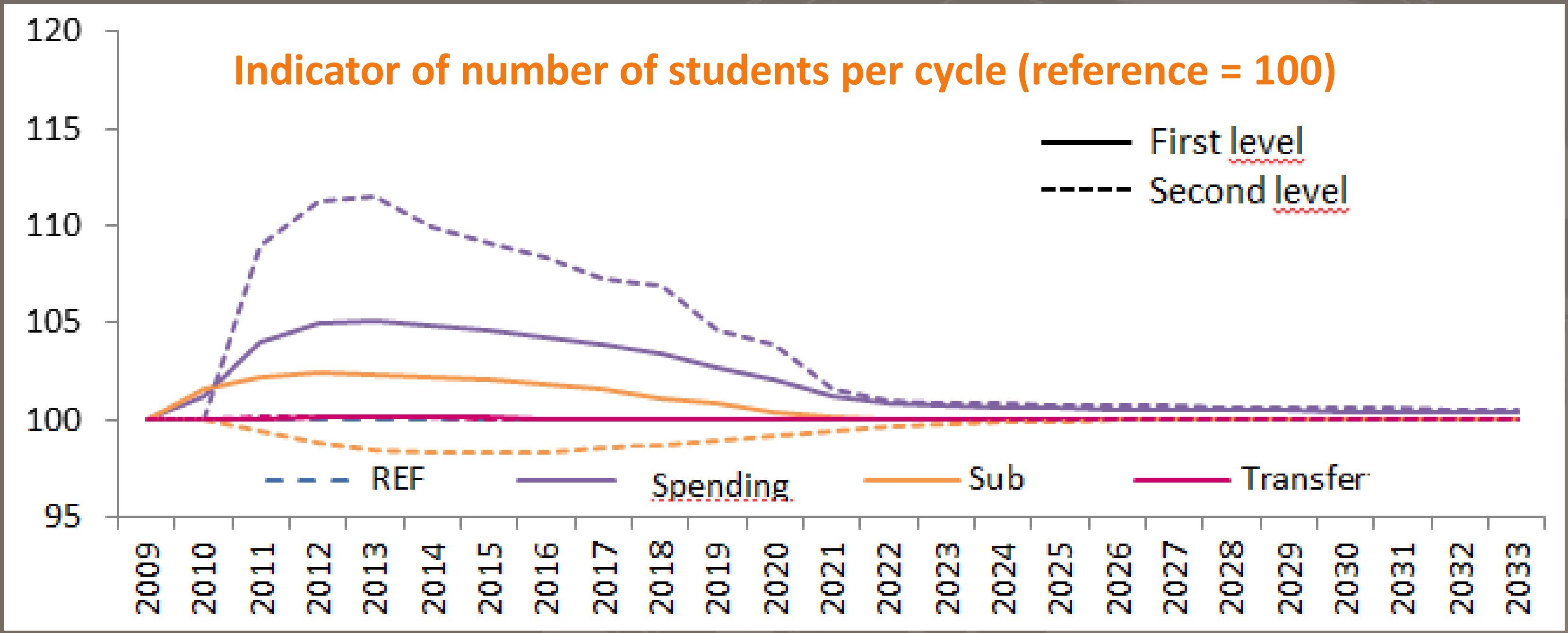


“Spending”: improvement due to ↑education **quality** index

“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



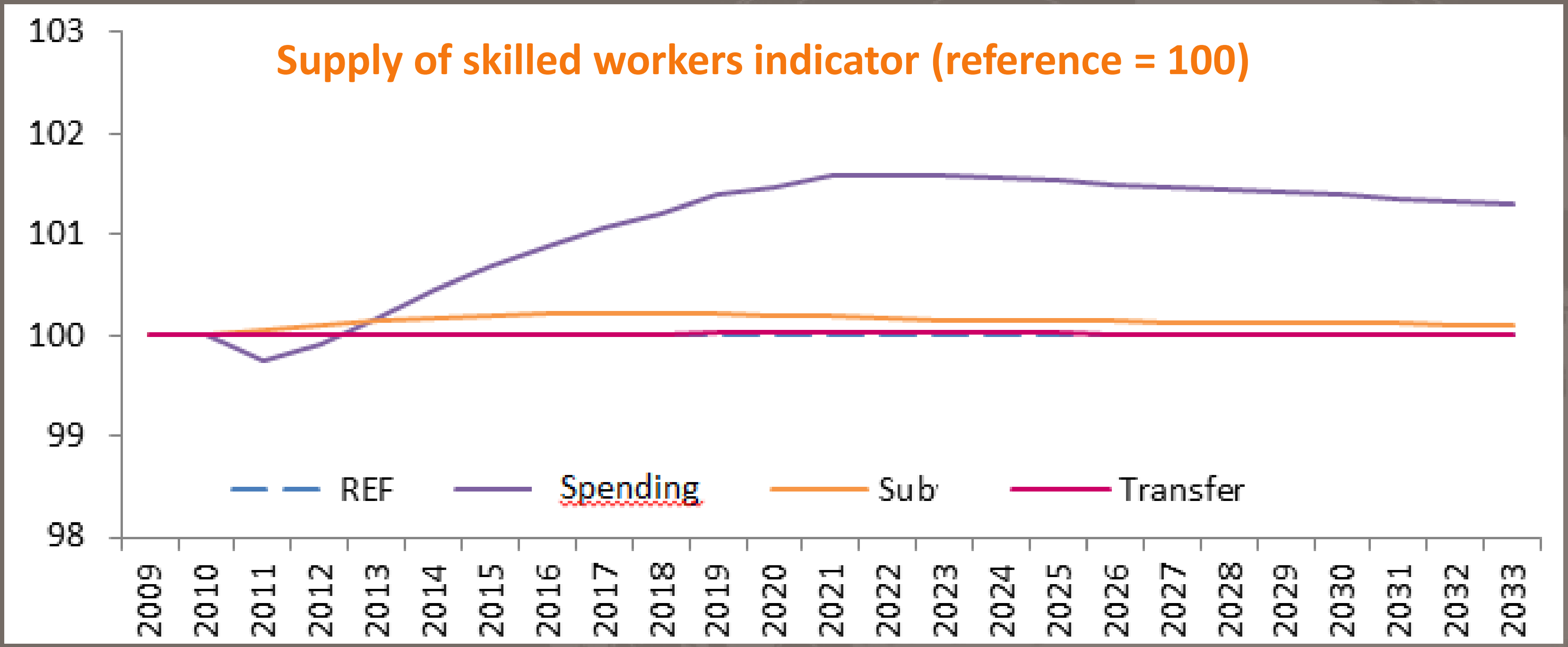
"sub": ↓ education quality index

→ ↑ dropout rate

→ ↓ **transition rate**

→ ↓ **number of** students in the second level

Results and Discussion: Economy

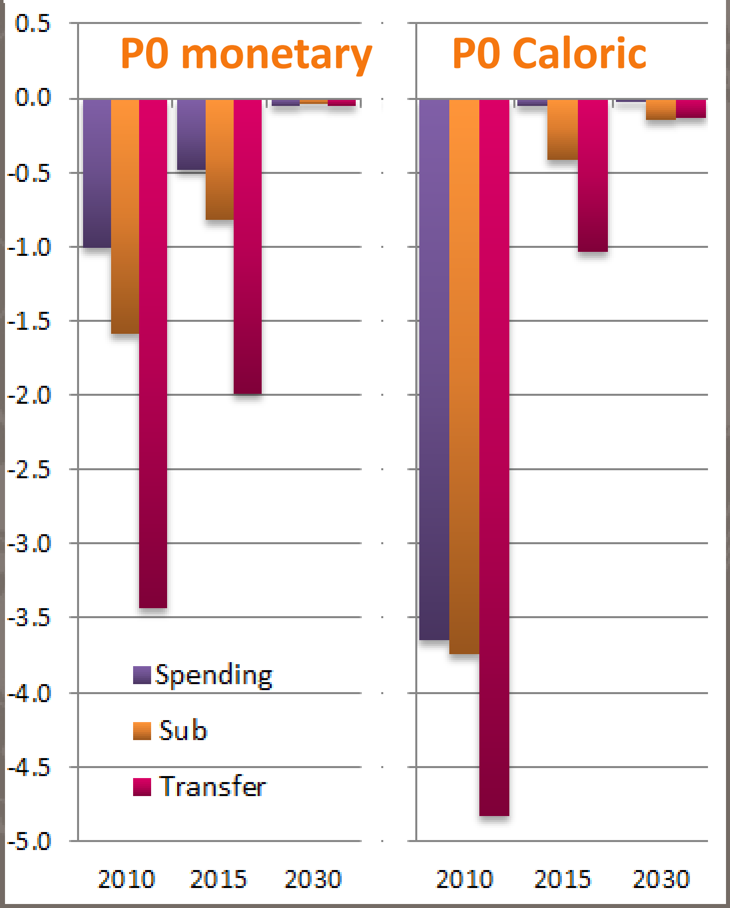


“Spending”: Only an increase in public education spending **increases** the supply of **skilled workers**.

Results and Discussion: Children Poverty

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

Variation (in percentage points) of poverty indicators with respect to reference scenario



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** pep

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