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DEMOGRAPHIC DIVIDEND IN SENEGAL

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SENEGAL
CONTEXT

STYLISED FACT: Senegal is experiencing a demographic transition
STYLISED FACT: NTA results for Senegal

OPPORTUNITY WINDOW: Senegal DD opportunity window

CHALLENGE: Is Senegal LCD system funding is sustainable?

CONCLUSIONS
INCIDENCE OF POVERTY REMAINS HIGH (52.2% IN 2005 AND 46.7% IN 2011 ESPS 1 & 2)

ACHIEVING ALL THE MDGS REMAINS PROBLEMATIC

INADEQUATE ECONOMIC PROGRAMS WITH THE SOCIAL DEMAND
• Even in 2030 the structure of the population of Senegal still has a very large compared to the base Tunisia
STYLIZED FACT: Senegal is experiencing a demographic transition.

The **total fertility rate** went from **6.6 children per woman** in 1986 to **5.0** in 2011.

(Source: DHS Surveys, UN)
STYLIZED FACT: Senegal is experiencing a demographic transition. The population growth rate decreased from 3.1 in 1986 to 2.3 in 2011. (Source: UN Population Projections)
STYLIZED FACT: Senegal is experiencing a demographic transition

MORTALITY DROPPED SIGNIFICANTLY IN THE SAME PERIOD.

- THE **INFANT MORTALITY RATE** (FROM 86.4 TO 47 PER THOUSAND BIRTHS)

- THE **MATERNAL MORTALITY Ratio** (FROM 769/100,000 births in 1990 to 392 in 2011)

(SOURCE: DHS SURVEYS)
STYLIZED FACT: Senegal is experiencing a demographic transition

**CHANGE IN THE AGE STRUCTURE**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>0-19</th>
<th>20-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>55.0%</td>
<td>41.3%</td>
<td>3.6%</td>
</tr>
<tr>
<td>2011</td>
<td>51.3%</td>
<td>44.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>2030</td>
<td>41.9%</td>
<td>53.0%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>
STYLIZED FACT: Senegal is experiencing a demographic transition

The *dependency ratio* decreased from 1.33 in 1986 to 1.15 in 2011.

*This is the sign of a very slow transition*

Note: This ratio is overestimated as it excludes the 2 million migrants (25% of the labor force) of the diaspora.

(* Source: DHS surveys)
STYLIZED FACT : Senegal is experiencing a demographic transition

- CONSTRAINTS AND LIMITATIONS

- **MATERNAL AND INFANT MORTALITY**, **WHILE DECLINING, ARE STILL HIGH** (SENEGAL WILL NOT ACHIEVE THE MDGS FOR THESE INDICATORS)

- **USE OF FAMILY PLANNING IS STILL VERY LOW** (12% OF WOMAN IN 2010)

- **CULTURAL RESISTANCE STILL PRESENT**
Aggregate labor income and consumption in Senegal, 2005. Source: NTA data.
A new generation of FP is needed (Planning Policies)

STYLIZED FACT: NTA Results for Senegal

Estimation of annual growth rate of support ratio in Senegal based on low, middle and high fertility for the period 2000 to 2050

Source: calculation on NTA data; Estimation of population and projection provided by UN Population 2012.
OPPORTUNITY WINDOW

GDP per capita

Quality of employment strategies

First dividend

1- job-creation strategy
2- Population strategy (FP)

Second dividend

Adapted from Mason and Lee

\[
\log \left( \frac{Y}{P} \right) = \log \left( \frac{Y}{L} \right) + \log \left( \frac{L}{P} \right)
\]
First and second demographic dividend in Senegal

Estimation of potential GDP growth, Source: ANSD Sénégal
CHALLENGE: Is Senegal’s system of financing LCD sustainable?

• The life cycle deficit represent 47% of GDP and is funded from two sources:
  - Reallocation of capital income
  - Net transfers

• Private transfers from diaspora are the primary source of funding, accounted for 94% of net transfers, while public transfers represent only 6%
Origin of transfers in Senegal

67% of transfers received originate from Europe and 25% from Africa

Source: Enquête sur les transferts de fonds des émigrés 2012, DMC, Ministère de l’Economie et des Finances
Transfers by emigrants’ education level in Senegal

54% of transfers received are made by emigrants with at most primary level education.

Source: Enquête sur les transferts de fonds des émigrés 2012, DMC, Ministère de l’Economie et des Finances, Sénégal
Sustainability of Nets Transfers in Senegal

• The sustainability of long-term transfer was studied on the basis of three scenarios:

1- The first scenario is based on an assumption that net transfers will continue to grow at the average annual rate of 6.7% calculated for the period 2007-2010.

2- The second scenario is based on an assumption that net transfers will grow at an average annual rate of 7.5%.

3- The third scenario is based on an assumption that net transfers will grow at an average annual rate of 9%.
## Sustainability of Nets Transfers in Senegal

<table>
<thead>
<tr>
<th>Années</th>
<th>Transfers needed to finance the life cycle deficit (Billions of CFA)</th>
<th>scenario 1 Assumption</th>
<th>scenario 2 Assumption</th>
<th>scenario 3 Assumption</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Average annual Growth rate: 1,067</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2010</td>
<td>3553</td>
<td>565</td>
<td>565</td>
<td>565</td>
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<tr>
<td>2020</td>
<td>6213</td>
<td>1080</td>
<td>1164</td>
<td>1338</td>
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<td>7545</td>
<td>10194</td>
<td>17746</td>
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</table>
Sustainability of Nets Transfers in Senegal

- It will take an average annual growth rate of 9%, much higher than the current rate of 6.7%, for net transfers to finance the lifecycle deficit in 2050.

- These results show that transfers cannot sustainably finance the lifecycle deficit in the long term.

- Indeed, the growth rate of transfers needed to cover the deficit is not consistent with the difficulties of the current international context:

  - Insecurity among emigrants (small jobs, difficult economic situation in Europe) reduces their chance to send money back to Senegal.
Conclusion

• For Senegal to benefit from the first demographic dividend, from 2000 to 2040, requires a set of measures such as:

  • Conduct a massive and sustained investment in education and health

  • Promote of family planning and the fight against malnutrition

  • Create jobs
Recommandations

• Is Senegal benefiting now from DD?

• Demographic and economic projections show us a very complex probable future ...

• Extend the estimation of NTA in other African countries in general and in Francophone Africa in particular

• Initiate a program or an international fund for DD research in Africa.
THANKS