Demographic dividend: Global Perspective

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Patterns of working and earning are different in African countries

• Some countries have very low economic contributions from youth, which makes their high population share very costly (Nigeria, Kenya, South Africa).

• Other countries have very high economic contributions from youth (Senegal, Mozambique, Ethiopia—prelim).
Labor Income - African NTA Countries Compared to Latin America and South & South East Asia: Low Youth Income and High Youth Income

- Low youth labor income (Kenya, Nigeria, South Africa)
- High youth labor income (Ethiopia, Mozambique, Senegal)
- S & SE Asia
- Latin America

Average Labor Income (Relative to Avg Labor Income 30-49)

Nigeria, Kenya, S. Africa

Senegal, Mozambique, Ethiopia

Age
Looked at through labor income as done here, youth problem is 2 or 3 times worse than labor force participation suggests.
Patterns of consumption are also different in some countries

- The nearly universal pattern in developing countries is that consumption is very similar at all adult ages.
- Elderly consume about the same as younger adults.
- Some African countries have this pattern (Nigeria, Kenya).
- In others, consumption declines with age (Mozambique, Ethiopia—prelim)
  - South Africa and Senegal are somewhat like this too
Some African NTA Countries have low old age consumption, unlike all other regions and countries.
• We can put together the distinctive population age distribution with the distinctive age profiles of consumption and labor income.
Cumulative patterns of consumption and labor income in Africa and Germany

- **Nigeria**
  - Billions of naira
  - Age distribution

- **Kenya**
  - Million Kenya shillings
  - Age distribution

- **Senegal**
  - Million West African CFA francs
  - Age distribution

- **Germany**
  - Age distribution
What are the implications of moving from African pattern to lower fertility and smaller share of youth?

• The support ratio rises, generating the first demographic dividend and boosting income per consumer.

• The faster fertility declines the bigger the dividend.
The First Demographic Dividend in Nigeria under three different U.N. fertility scenarios (+ or - .5)
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Effect of half child less by 2050 is faster per cap inc growth by .1 to .2% per year for 40 years.
The second dividend: increased investment in human capital and assets

• Here, human capital.
• Theory describes the quantity-quality tradeoff.
• NTA finds this occurs through the public sector (higher spending per child when fertility is lower) and less through private spending (except in Asia, where both are strong).
Tradeoff between human-capital spending and fertility. Public and private spending per child on health and education relative to average labor income age 30-49.
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Along this fitted line:
If fertility declines from 4.5 to 3.5, HK rises 20%.
If fertility declines 50% (e.g. 4.6 to 2.3), HK rises 62%.
Policy and the Demographic Dividends

- Stronger fertility decline would raise growth rate of per capita income per effective consumer through reduced dependency.
- Stronger fertility decline would raise investments in human capital per child, with many benefits including higher labor productivity.
- Youth employment is a serious problem, much worse (when we look at labor income) then Labor Force Participation data suggest.
- In some countries, old age poverty on average is a potential problem warranting more research. This is unusual.
- Data systems should be improved to better inform policy.
NTA labor income measure shows youth problem (15-24) is more dire than LFP suggests.

• LFP in Senegal (67) is less than twice that in Nigeria (37), its av labor income 15-24 is more than 7 times as high. LFP in Mozambique is 1.3 times LFP in Kenya, but its av yl is 3 times as high. While Nigeria and South Africa have the same LFP, labor income 15-24 in S. Africa is twice that in Nigeria.

• yl(x) definitely conveys additional important information about hours of work and compensation beyond the simple percent employed. By this measure, the youth unemployment problem in Nigeria, Kenya and South Africa is much worse than it appears from LFP.