

*Population Projections: How Do Economic Conditions
Influence the Assumptions?*

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Outline of Presentation

- Understanding what drives fertility
- Demand and supply-side factors
- Bi-directional role of economic development
- Population policies drive economic outcomes
- Old assumptions/new questions
- What have we learned?
 - Micro
 - Macro
- What else to study?



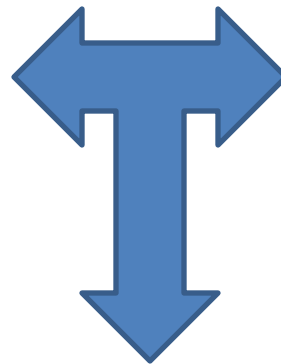
Demand and Supply Side Factors

Demand-side Factors

- Income
- Education
- Opportunity costs
- Knowledge/Beliefs
- Life expectancy

Supply-side Factors

- Access
- Health system
- Technology R&D



Economic
Development



Population and Economic Outcomes

- Fertility reduction -> cohort sizes, child and women's health improvements
- Women's economic opportunities -> investments in education and training
- Smaller family size -> capital accumulation, investments in child (quality)
- General equilibrium effects -> smaller and more skilled labor force = higher labor productivity and wages, greater disposable income = higher consumption, higher growth



Old assumptions/New questions

- Assumptions:
 - Qual/quant trade-off as driver of TFR
 - Focus on supply to reduce unmet need
- Questions:
 - How to employ policy levers with a better understanding of both demand and supply, but especially demand and how to influence it?
 - How to understand the role of population in macro-economic development? Longstanding question of whether positive, negative, or neutral.



What have we learned: micro?

- Evidence from long-term studies of welfare benefits to women and children from experimental and non-experimental studies
- Complexity of intra-HH decision-making and gender preferences (Field, Frankenburger)
- Female employment often negatively affected by children, **but...** (Hill/Aryeetey)
- Teenage pregnancy may not have longstanding negative effects (Leibbrandt)



What have we learned – macro?

- Mortality decline differentially affects urban and rural areas
- Fertility decline reduces youth dependency rates, raising national income per capita. (Dem-Div) **but...**
 - If below replacement level, high old-age dep. rate
 - If induces more Fe LFP, lowers wages
- Feedbacks induce economic growth in a process of cumulative causality.
- Fertility change has a small and lagged effect on economic growth (Weil/Wilde)



Where to make interventions?

- Population policy should be complemented by investments in education and health
- Priority on poor and marginalized populations
- Evidence-based programs and service delivery

Topics needing further research

- Women's empowerment and economic outcomes
- Household decision-making
- Macro effects: Dem-Div, Malthusian resource depletion, variation across settings



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THANK YOU

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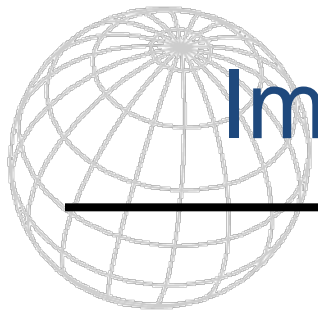


Fertility and female time allocation to income generating activities

Causal evidence from Tanzania

Judith Westeneng - Ben D'Exelle
Radboud University (The Netherlands)





Importance of female labour supply

Female labour supply: measured as ‘time dedicated to income-generating activities’

- Female empowerment
 - But, often at a cost: double burden (time poverty of women in Sub-Saharan Africa: Blackden & Wodon, 2006)
- Poverty reduction (e.g. comparative advantages of women)
- Well-being of children (e.g. school enrolment)





Fertility → female labour supply (1)

- Industrialized societies: women with more children are less active on labour market
 - (Angrist and Evans, AER 1998 for US; Cruces and Galiani, LE 2007 for Argentina and Mexico; Chun & Oh, 2002 for Korea)
- This might be different in Sub-Saharan countries:
 - Social status of women increases with number of children (Bryceson in Creighton & Omari, 1995)
 - The importance of extended households: mother substitutes (Wong & Levine, 1992)
 - Income generating activities concentrated in areas that allow an easy match with ‘domestic’ responsibilities: e.g. a small shop, crops or animals on patio, petty commerce (Bradshaw, 2002)
 - Informality; low startup costs

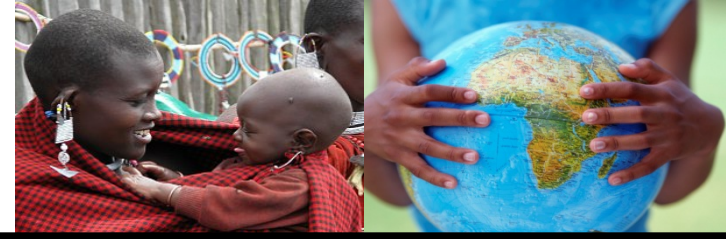
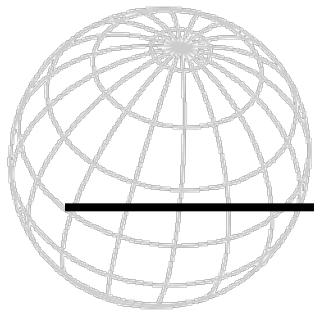




Fertility → female labour supply (2)

- Much empirical work on childbearing and labour supply: negative relationship is consistently shown.
- But, OLS regression estimates may bias this effect because of endogeneity issues
 - A need for exogenous determinants of fertility (e.g. Angrist and Evans, 1998)
 - A need for panel data to establish causal relationships (Greene and Merrick, 2005)
- In this paper we will try to contribute to filling this gap by estimating the effect of fertility on female labour supply using panel data.





Possible explanations:

- Young generation: having more young children leads to less time allocation to income generating activities.
 - other household members (particularly husband) will take care of income generation
 - young women need to prove themselves through reproductive tasks (Bryceson in Creighton & Omari, 1995)
- Older generation: more young children leads to more time allocation to income generating activities.
 - young children become 'economically' the burden of women (Mason, 2001)
 - having more (young) children leads to more social status (Bryceson in Creighton & Omari, 1995) and the possibility to dedicate time to income generating activities