## **Economic Implications** of Teenage Pregnancy

### Alejandro N. Herrin

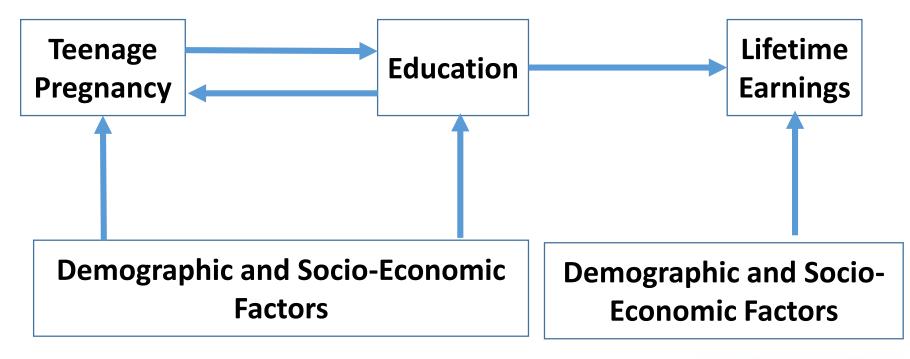








### Framework





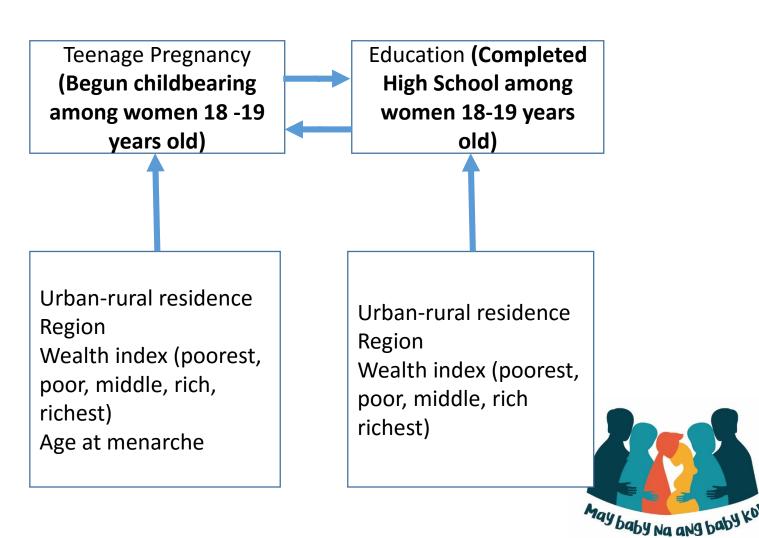
### **Data**

- National Demographic and Health Survey (NDHS) 2013

   source of data for estimating the relationships
   between teenage pregnancy and education, and demographic and socio-economic factors
- Labor Force Survey-Family Income and Expenditure Survey (LFS-FIES) 2012 source of data for estimating the effect of education on wage rates, taking into account demographic and socio-economic factors and participation of women in work for pay

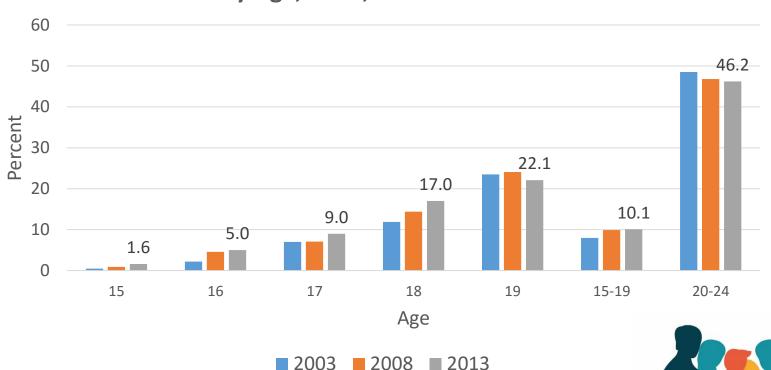
May baby na ang bat

# **Empirical model: Early Childbearing and High School Completion**



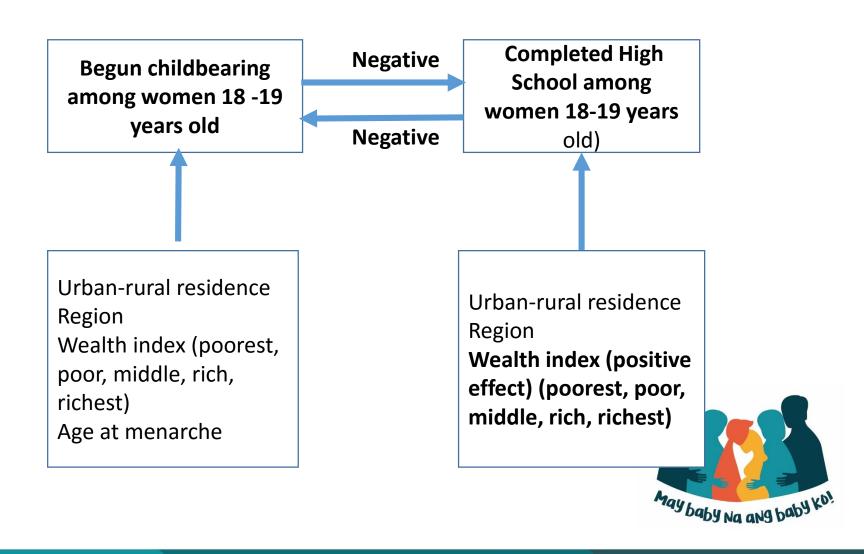
## Teenage Childbearing, NDHS 2013

Percent of Women Who Have Begun Childbearing by Age, 2003, 2008 and 2013

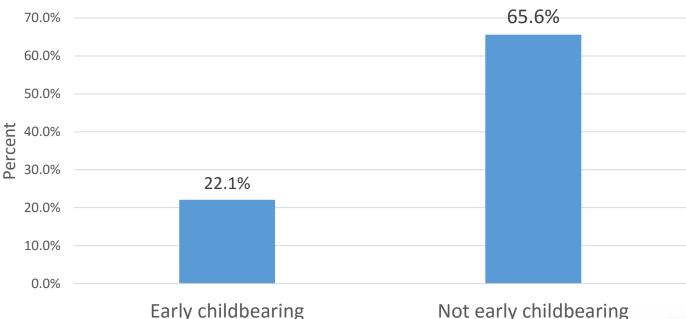


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Source: NDHS 2003, 2008 and 2013



Predicted High School Completion Rate by Early Childbearing Experience Status



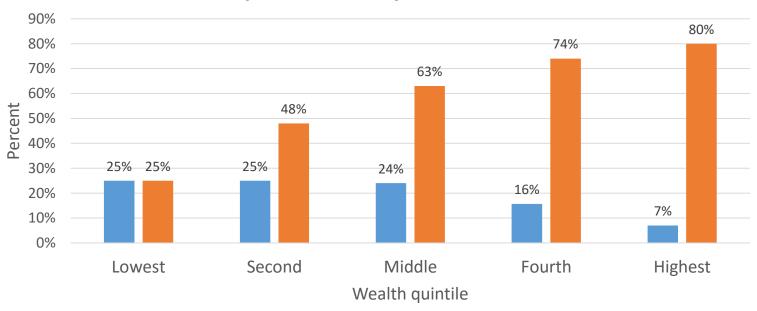
Early childbearing status

Source of basic data: NDHS 2013



<sup>\*</sup>Evaluated at mean values of other independent variables

Predicted High School Completion Rate by Early Childbearing Experience and by Wealth Quintile



Experienced early childbearing

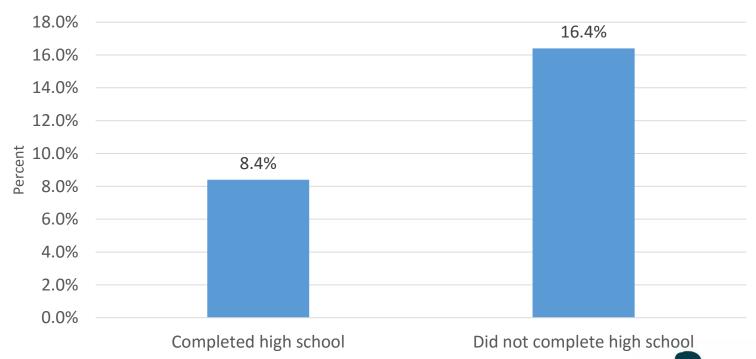
■ Did not experience early childbear

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Source of basic data: NDHS 2013

<sup>\*</sup>Evaluated at mean values of other independent variables

#### **Predicted Early Childbearing Rate by High School Completion**



High school completion status

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Source of basic data: NDHS 2013

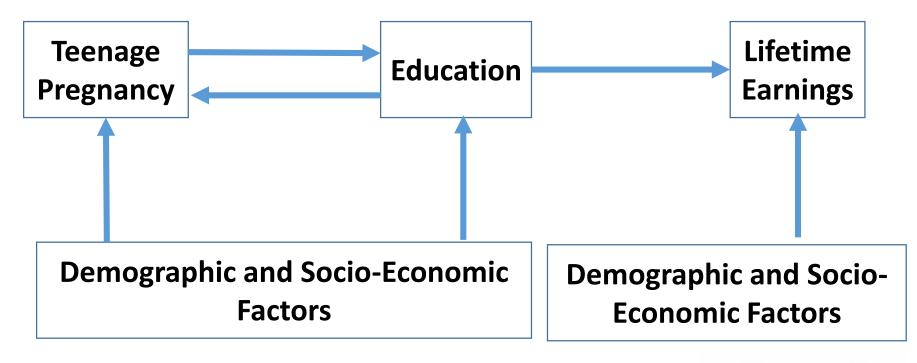
<sup>\*</sup>Evaluated at mean values of other independent variables

## Summary of results: early childbearing and education

- Early childbearing reduces probability of completing high school
- Completing high school reduces the probability of early childbearing
- Teens in richer households (measured by wealth quintiles) have higher probability of completing high school than teens in poorer households.



### Framework





## **Empirical model: Education and Wage Rate Determination**

Participation in Work for Pay

Age
Urban-rural residence
Region
Wealth index
(poorest, poor,
middle, rich richest)
Married
Household age
composition

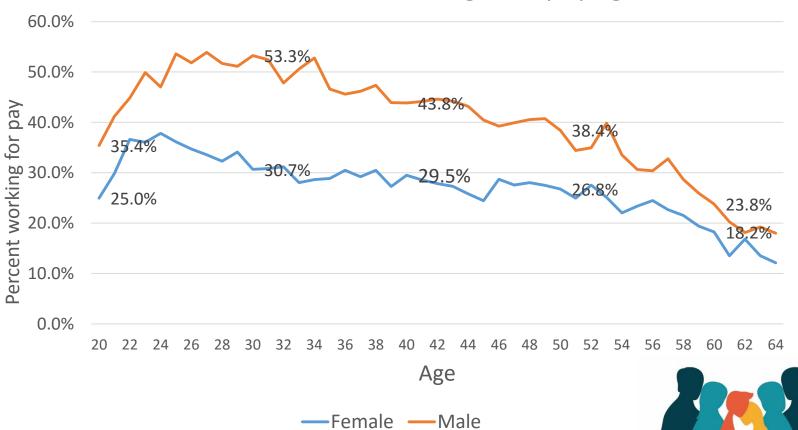
Daily Wage Rates among those Who Work for Pay

Completed high school Age Urban-rural residence Region

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### Participation in Paid Work, LFS-FIES 2012

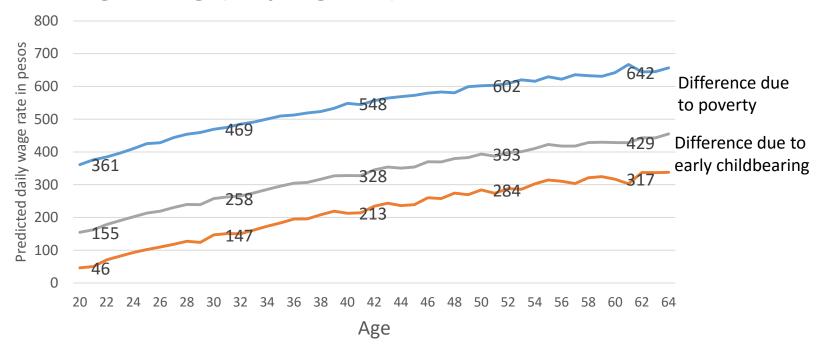
Percent of Male and Female Working for Pay by Age, 2012



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## Results: Education and Wage Rate Determination

**Age-Earnings (Daily Wage Rate) Profiles for Females** 



- Completed high school
- —Did not complete high school (due to poverty and early childbearing)
- —Did not complete HS (due to poverty only, excluding early childbearing)

Source of basic data: LFS-FIES 2012



# Summary of results: education, wage rates and foregone earnings

- Age-earnings (wage rate) profile is higher among those who completed high school compared to those who did not
- Early childbearing reduces age-earnings (wage rate) profile
- Discounted lifetime cash earnings foregone of cohort of teens age 18-19 resulting from early childbearing is P27 billion in 2012. This is equivalent to one percent of GDP in 2012
- This lifetime foregone earnings as a percent of GDP is comparable to US and China (UNFPA 2013; Chaaban and Cunningham 2011)

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## Overall summary of results

- Early childbearing and education
  - Early childbearing reduces probability of completing high school
  - Completing high school reduces the probability of early childbearing
  - Teens in richer households (measured by wealth quintiles) have higher probability of completing high school than teens in poorer households.
- Education, wage rates and foregone earnings
  - Age-earnings (wage rate) profile is higher among those who completed high school compared to those who did not
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## Other potential implications

- Health effects: early childbearing a factor in complications in pregnancy and childbirth leading to maternal mortality; a factor in the incidence of preterm and low birth weight babies with elevated risk of neonatal mortality.
- Intergenerational effects: children of teen mothers tend to have lower schooling attainment
- **Psychological costs**: stigma, shame to the family, stress, low self-esteem; strained relationship between partners and between families
- Other economic cost: additional financial burden from unplanned/mistimed pregnancy and birth – to teen's own family or her parents

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## Mabuhay

