



**The influence of government programs  
on the fertility of the poor:  
a comparison between Mexico and Brazil**

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## **MOTIVATION OF THIS EXERCISE**



- ✓ **Old debate about fertility control and reproductive health restarted in Brazil.**
- ✓ **Debate restarted because of fertility of poor women.**
- ✓ **We can compare Brazil with another country with different policies, but with similar socioeconomic characteristics.**
- ✓ **Mexico has government family planning, which Brazil does not have.**
- ✓ **Mexico has social inequality such as Brazil.**



## **DIFFERENCES IN FAMILY PLANNING SERVICES AND POLICIES**



- ✓ **MEXICO:** government programs for both insured and uninsured with promotion of IUD and female sterilization.
- ✓ **BRAZIL:** much less emphasis on the supply of methods, restrictions on female sterilization, especially postpartum, frustrated demand for contraception, and exchange of sterilization for votes.



## **MAIN QUESTION FOR SELECTED STATES**



- ✓ **Within a municipality, will fertility differentials by socioeconomic status be smaller in Mexico than in Brazil?**
- ✓ **Two poor states were selected in each country:**
  - **Guerrero and Veracruz in Mexico.**
  - **Pernambuco and Piauí in Brazil.**
- ✓ **Two wealthier states were selected in each country:**
  - **Morelos and Tamaulipas in Mexico.**
  - **Espírito Santo and Rio Grande do Sul in Brazil.**



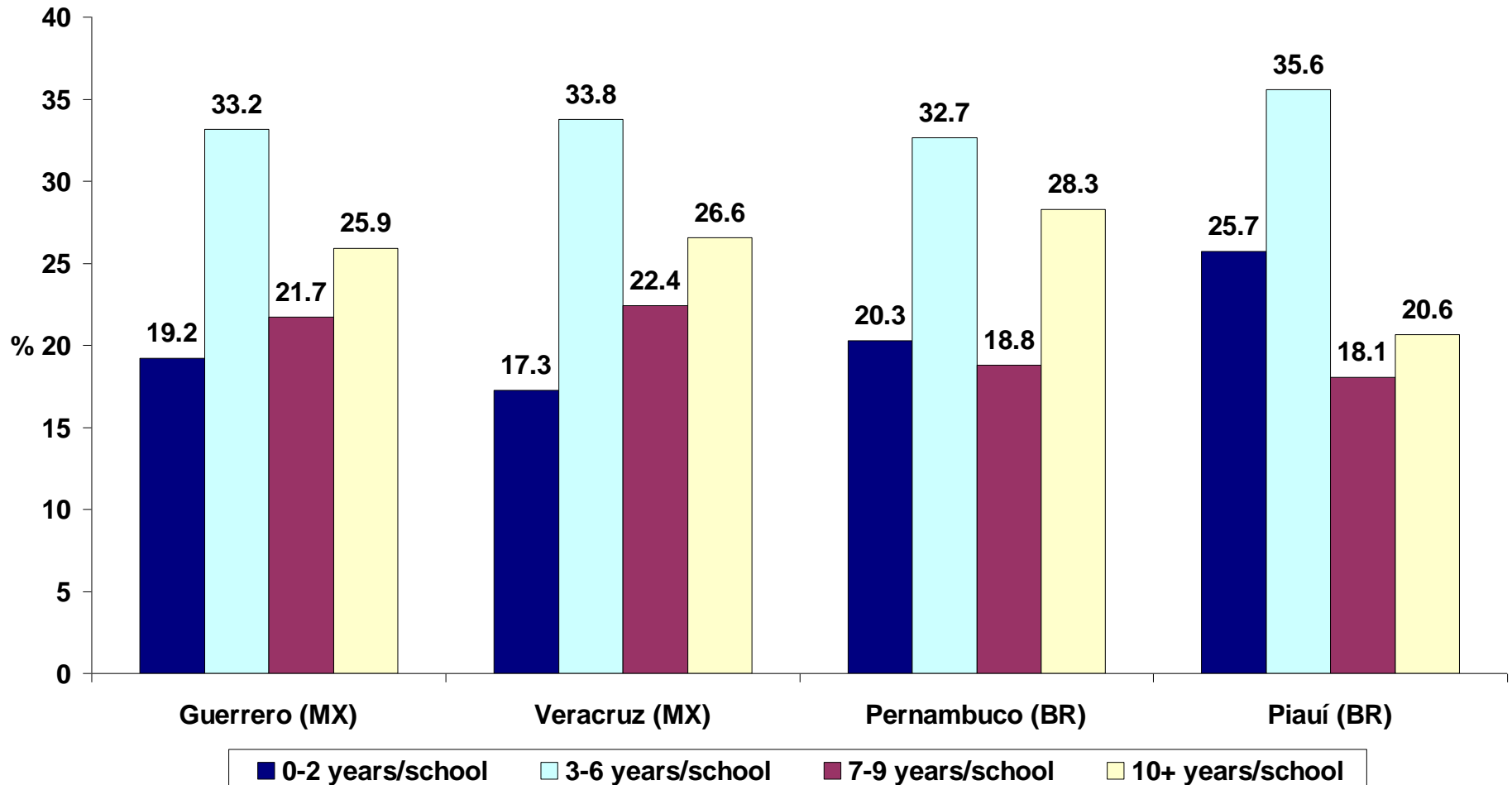
# COMPARISON OF SOCIOECONOMIC INDICATORS



- ✓ **2000 censuses have a lot in common:**
  - **10% samples.**
  - **Date of last live birth.**
  - **Education.**
  - **Electrification, Television, Refrigerator.**

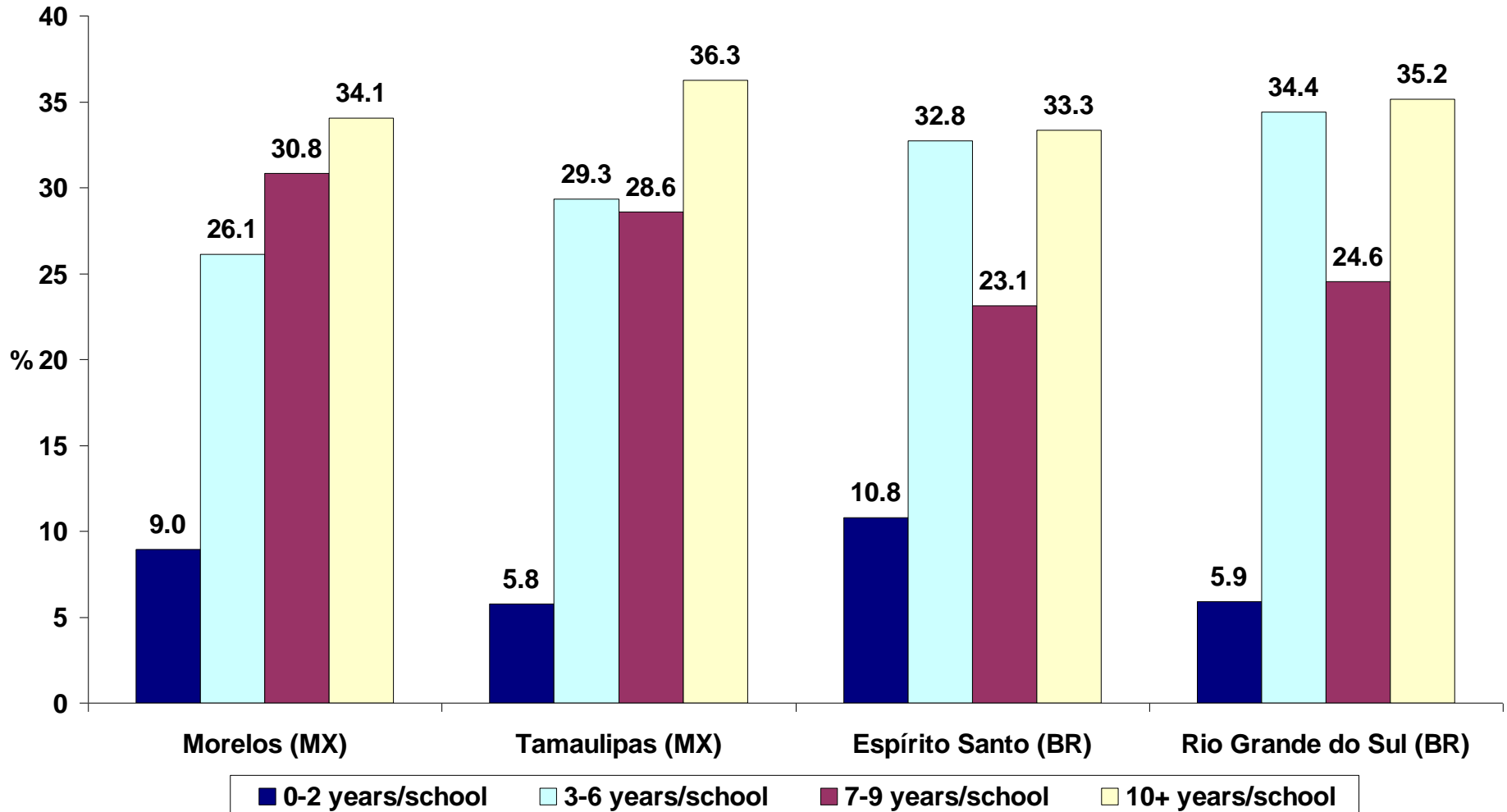


# WOMEN BY YEARS OF SCHOOLING IN POORER STATES OF MEXICO AND BRAZIL, 2000



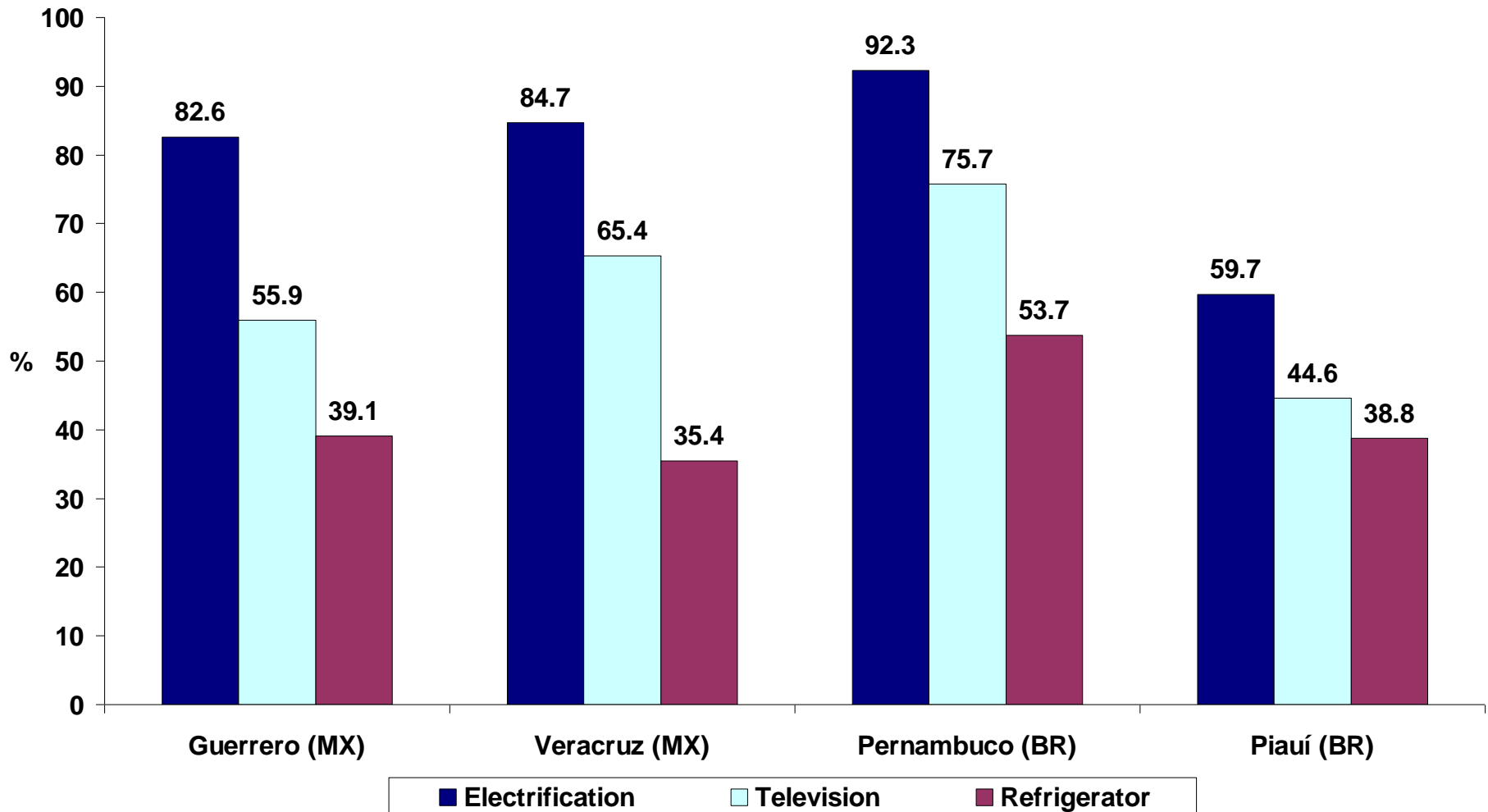


# WOMEN BY YEARS OF SCHOOLING IN WEALTHIER STATES OF MEXICO AND BRAZIL, 2000





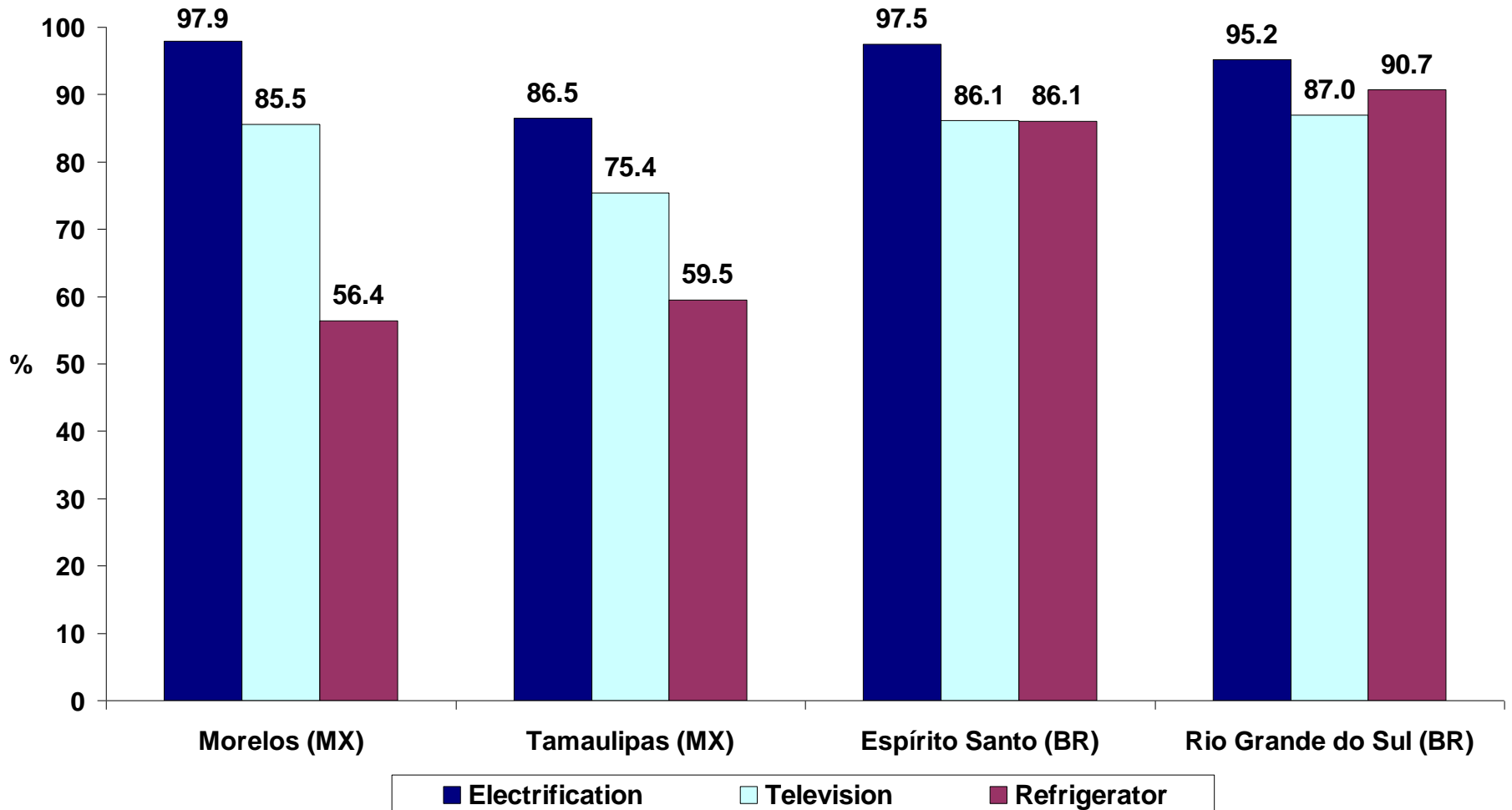
# PERCENT OF HOUSEHOLDS WITH SPECIFIC INFRASTRUCTURE IN POORER STATES OF MEXICO AND BRAZIL, 2000







# PERCENT OF HOUSEHOLDS WITH SPECIFIC INFRASTRUCTURE IN WEALTHIER STATES OF MEXICO AND BRAZIL, 2000





## **FERTILITY PREFERENCE AND PLACE OF BIRTH**



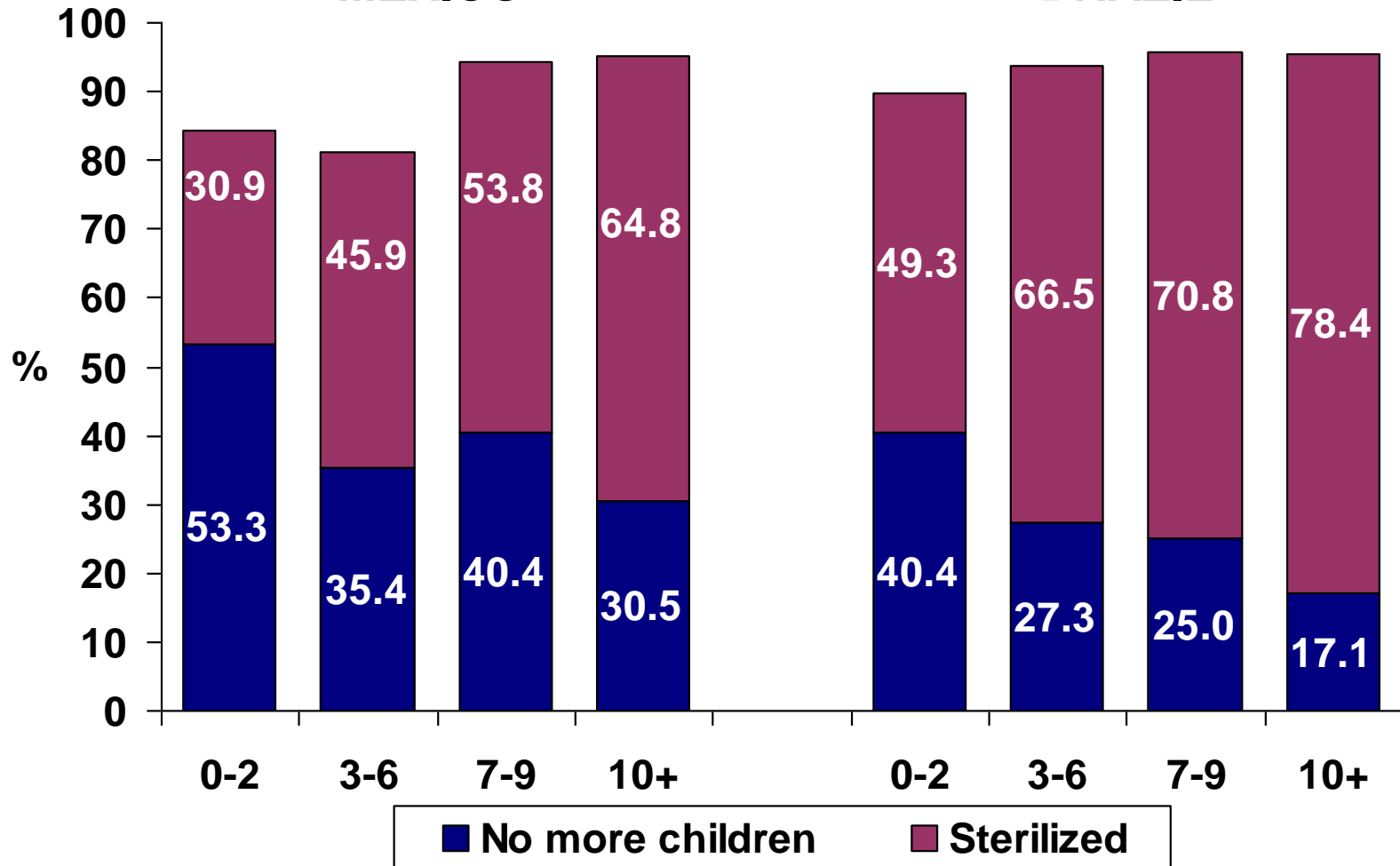
- ✓ **Data on fertility desires and place of birth are from:**
  - **1997 Mexican Demographic Dynamics Survey (ENADID).**
  - **1996 Brazilian Demographic Health Survey (DHS).**



# WOMEN WITH PARITY EQUALS TO 3 BY YEARS OF SCHOOLING AND FERTILITY PREFERENCE

## GUERRERO / VERACRUZ MEXICO

## NORTHEAST BRAZIL

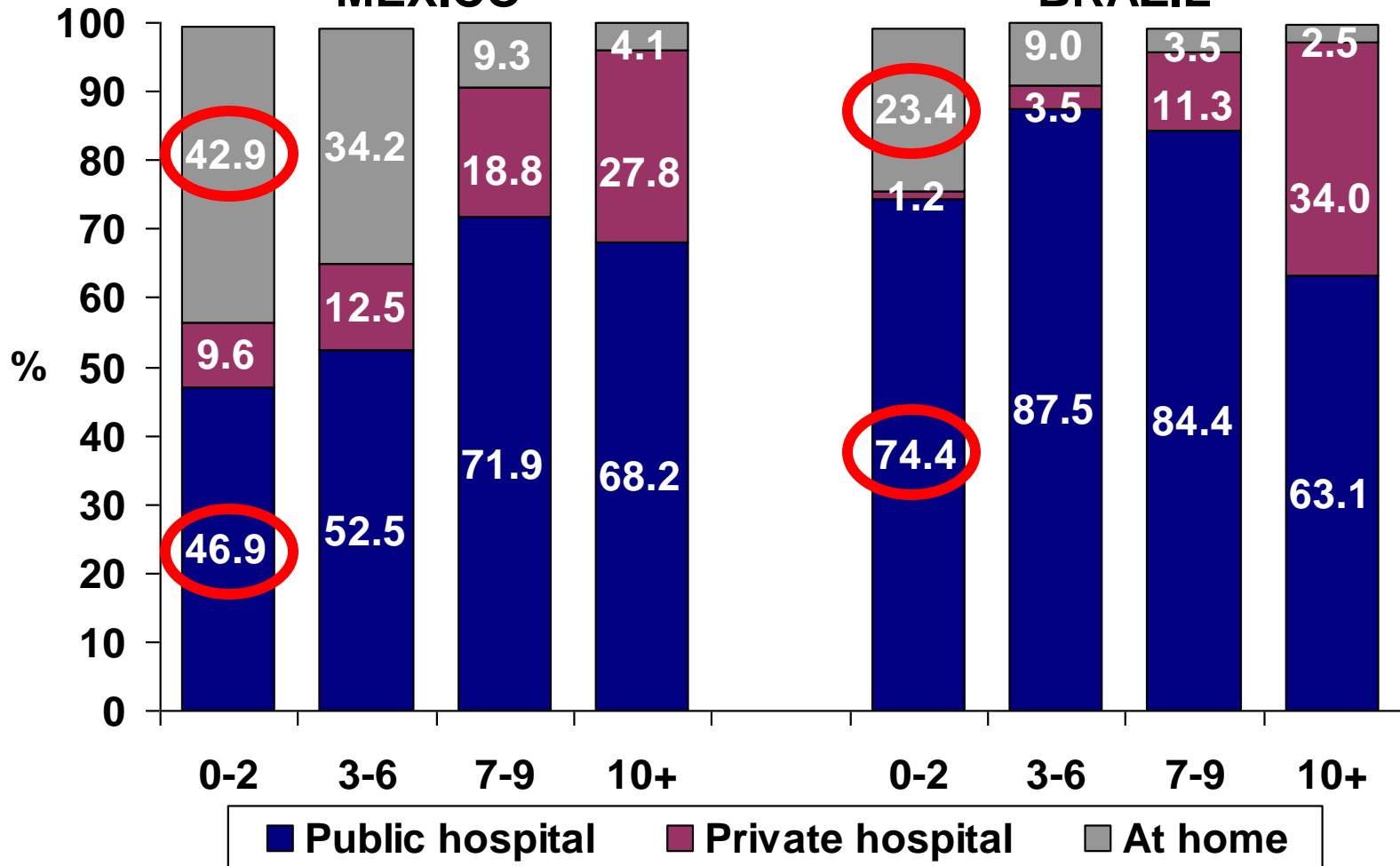




# WOMEN BY YEARS OF SCHOOLING AND PLACE OF DELIVERY OF LAST CHILD

## GUERRERO / VERACRUZ MEXICO

## NORTHEAST BRAZIL

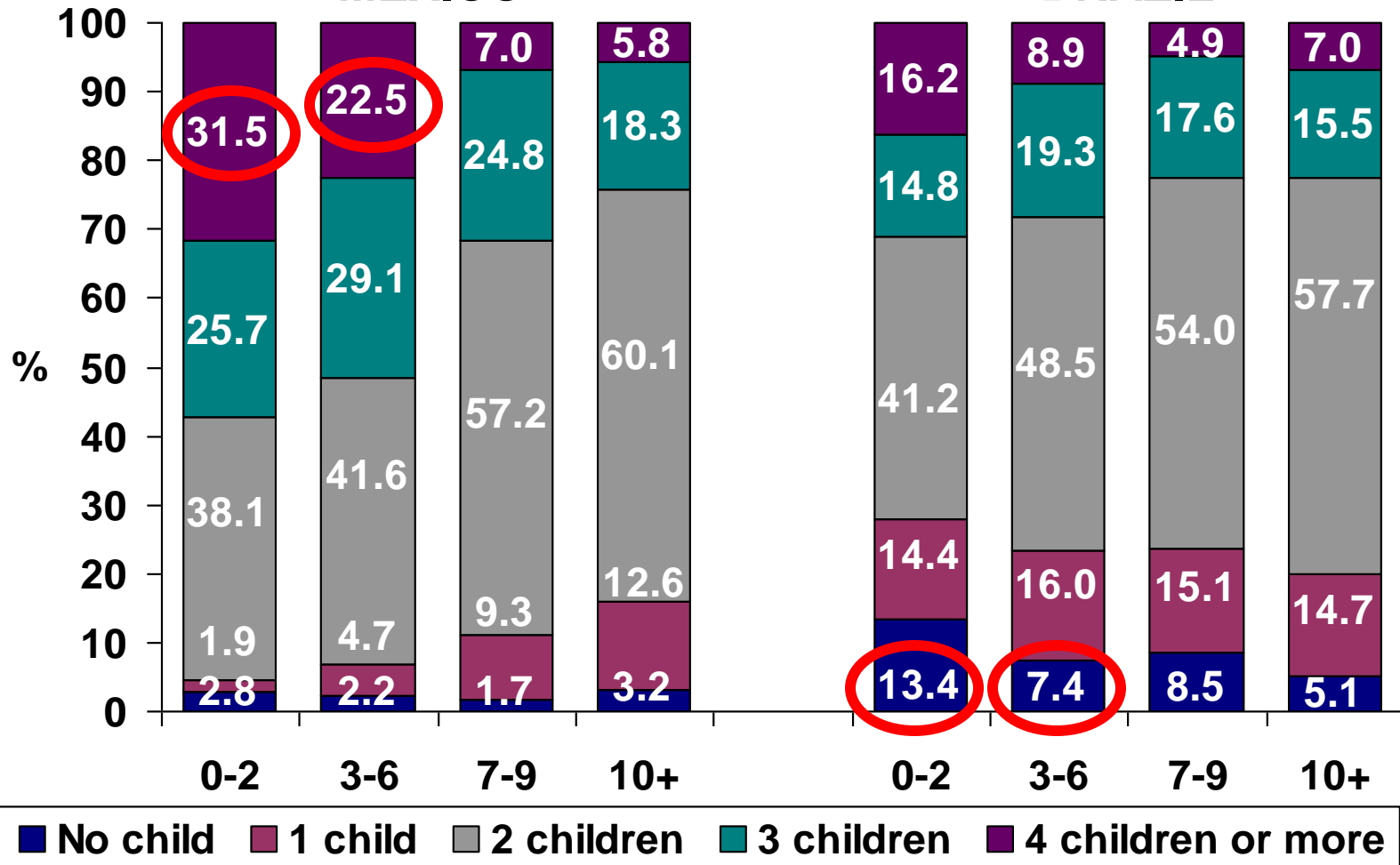




# WOMEN 20-29 YEARS OF AGE BY YEARS OF SCHOOLING AND IDEAL NUMBER OF CHILDREN

## GUERRERO / VERACRUZ MEXICO

## NORTHEAST BRAZIL





# LOGISTIC MODEL USING 2000 CENSUSES

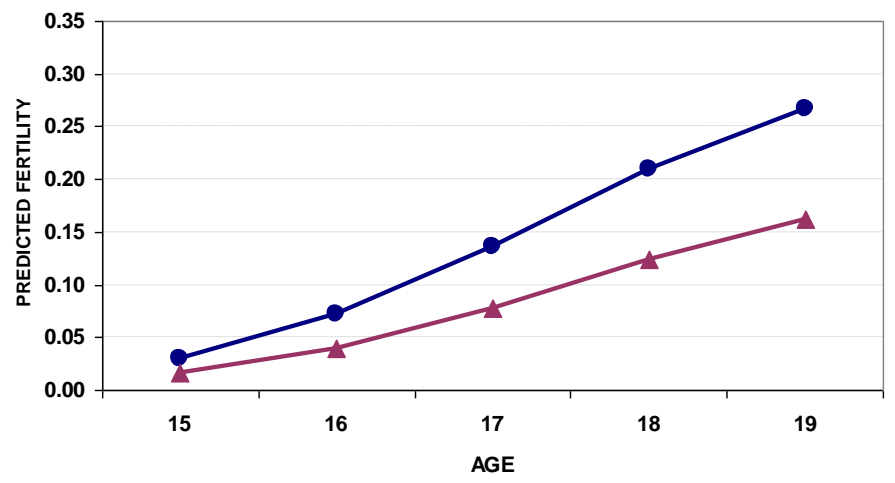


- ✓ In Brazil, the TFR in a municipality is well predicted by the degree of electrification and the average level of women's education.
- ✓ Dependent variable: child born alive last year.
- ✓ Independent variables:
  - Age, age-squared, education groups, parity, catholic, indigenous, states, municipal electrification factor.
  - Interactions with states and electrification.

# POORER STATES & 15-19 YEARS

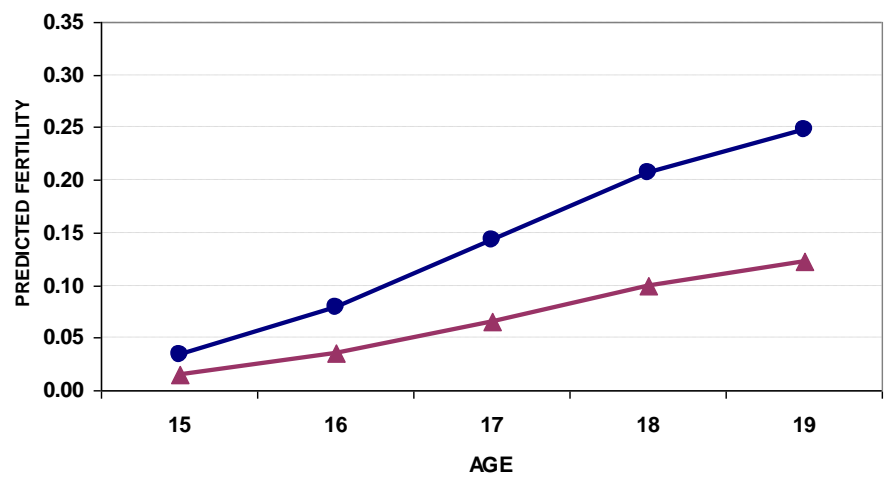


## GUERRERO - MEXICO



● 0-2 years/sch.      ▲ 7-9 years/sch.

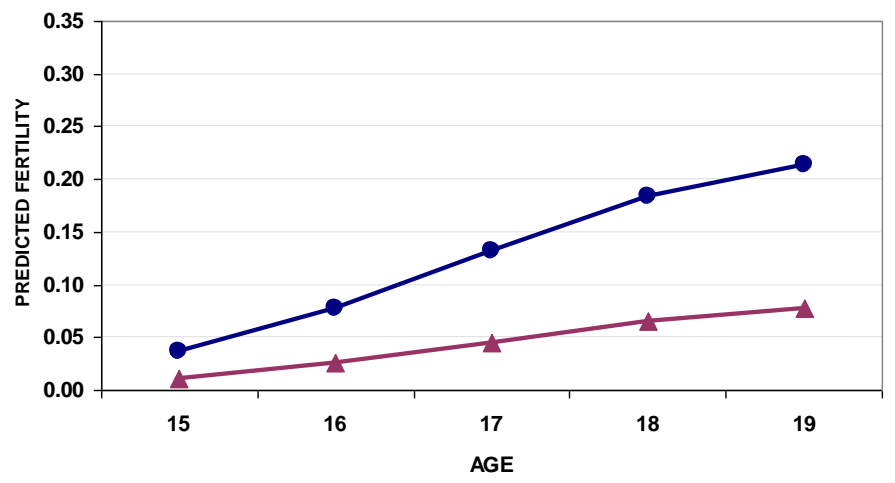
## VERACRUZ - MEXICO



● 0-2 years/sch.      ▲ 7-9 years/sch.

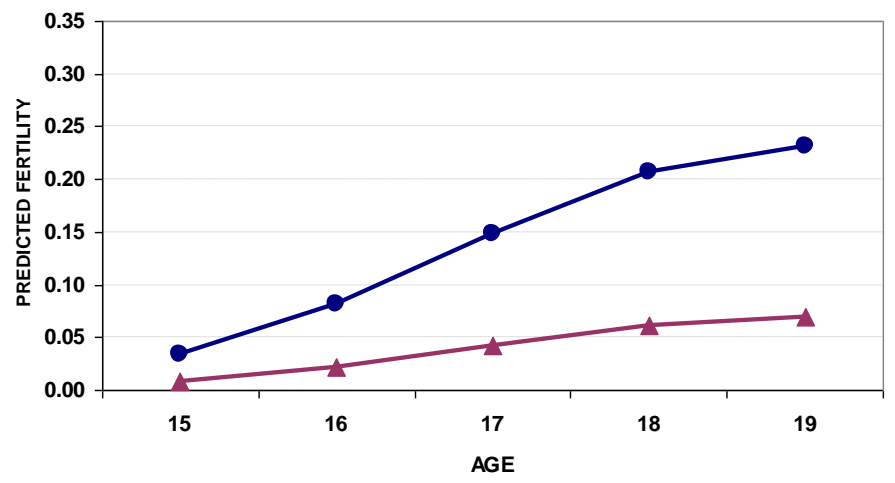


## PERNAMBUCO - BRAZIL



● 0-2 years/sch.      ▲ 7-9 years/sch.

## PIAUI - BRAZIL

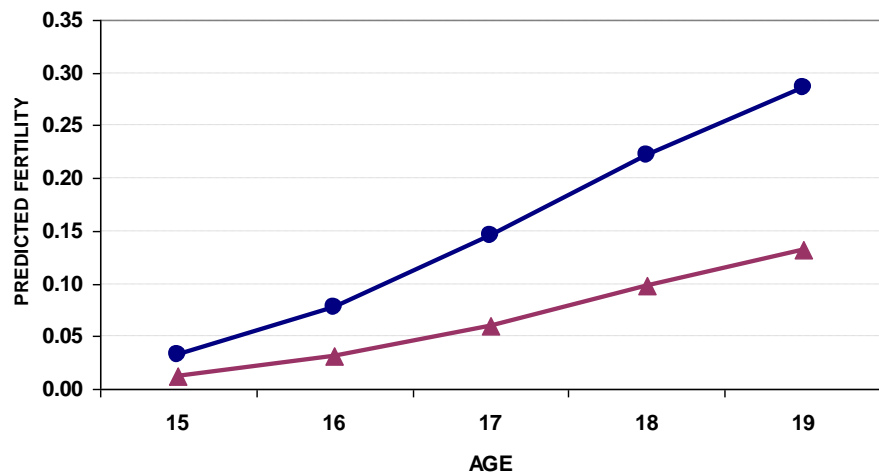


● 0-2 years/sch.      ▲ 7-9 years/sch.

# WEALTHIER STATES & 15-19 YEARS

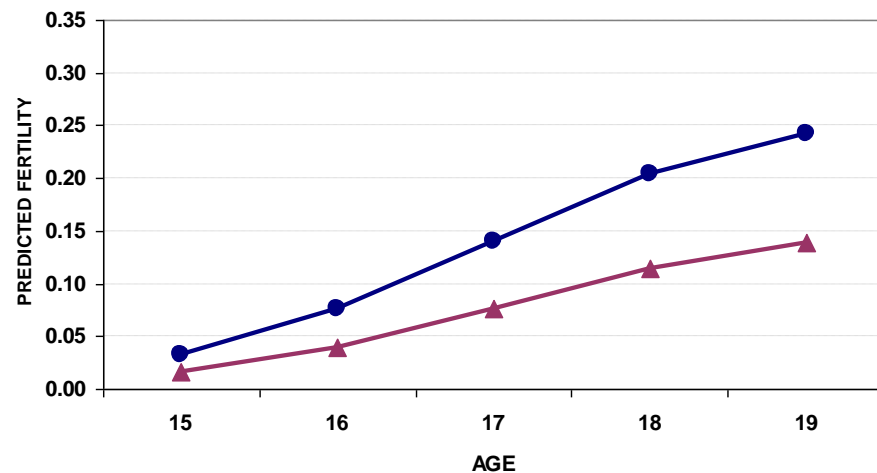


## MORELOS - MEXICO



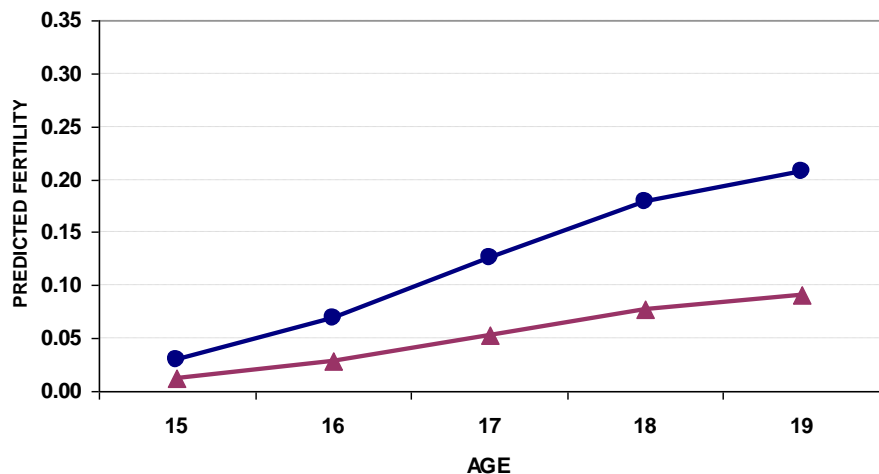
● 0-2 years/sch.      ▲ 7-9 years/sch.

## TAMAULIPAS - MEXICO



● 0-2 years/sch.      ▲ 7-9 years/sch.

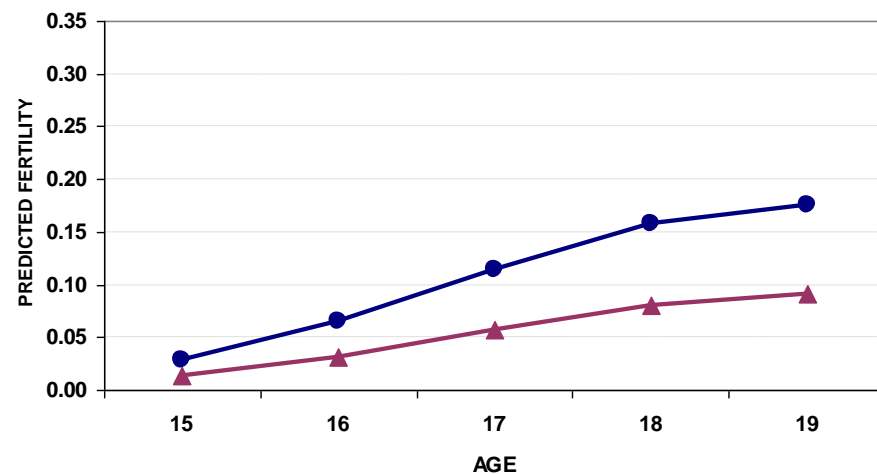
## ESPÍRITO SANTO - BRAZIL



● 0-2 years/sch.      ▲ 7-9 years/sch.



## RIO GRANDE DO SUL - BRAZIL



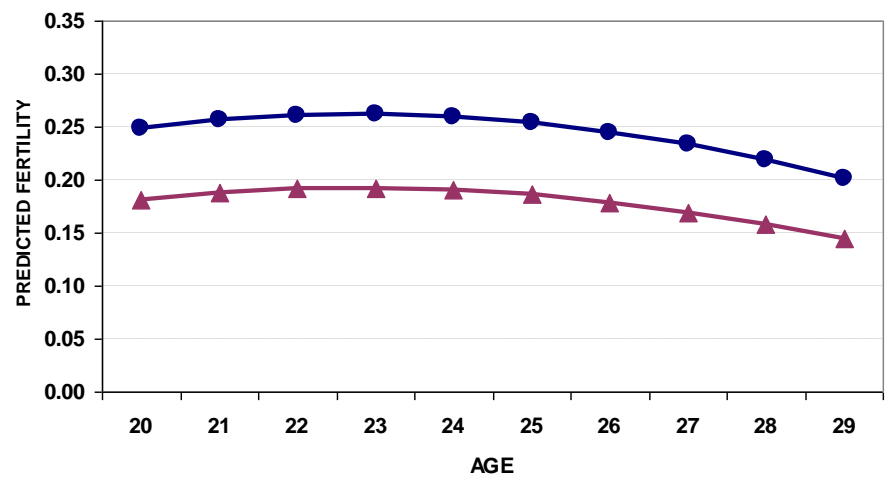
● 0-2 years/sch.      ▲ 7-9 years/sch.



# POORER STATES & 20-29 YEARS

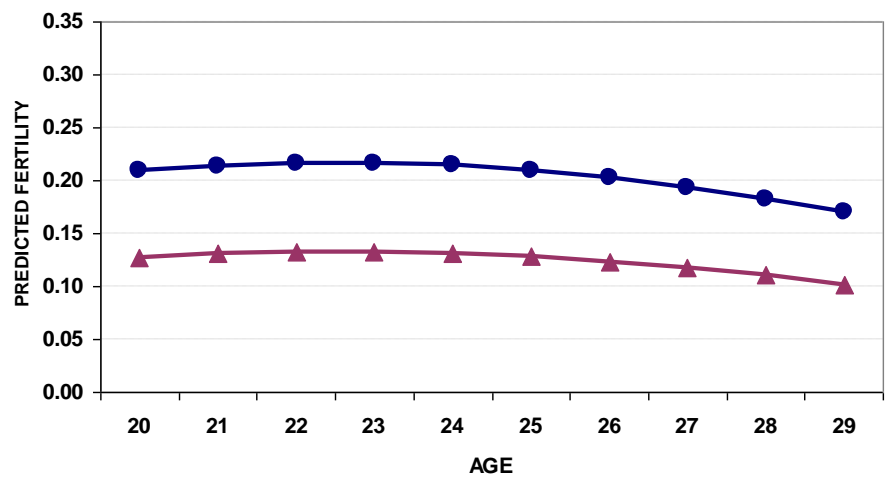


## GUERREREO - MEXICO



0-2 years/sch. 7-9 years/sch.

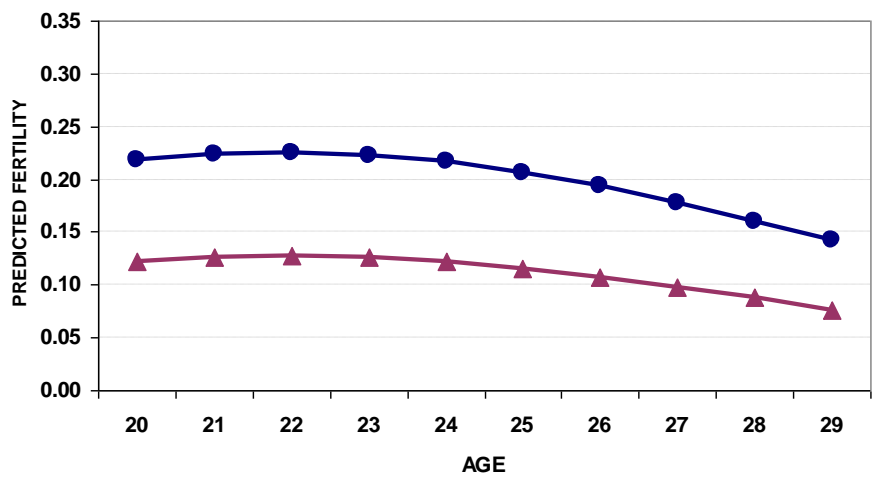
## VERACRUZ - MEXICO



0-2 years/sch. 7-9 years/sch.

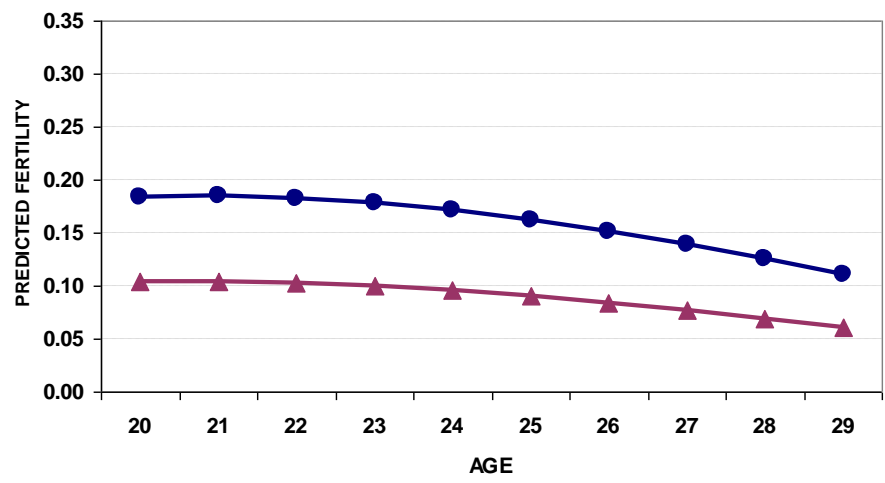


## PERNAMBUCO - BRAZIL



0-2 years/sch. 7-9 years/sch.

## PIAUI - BRAZIL

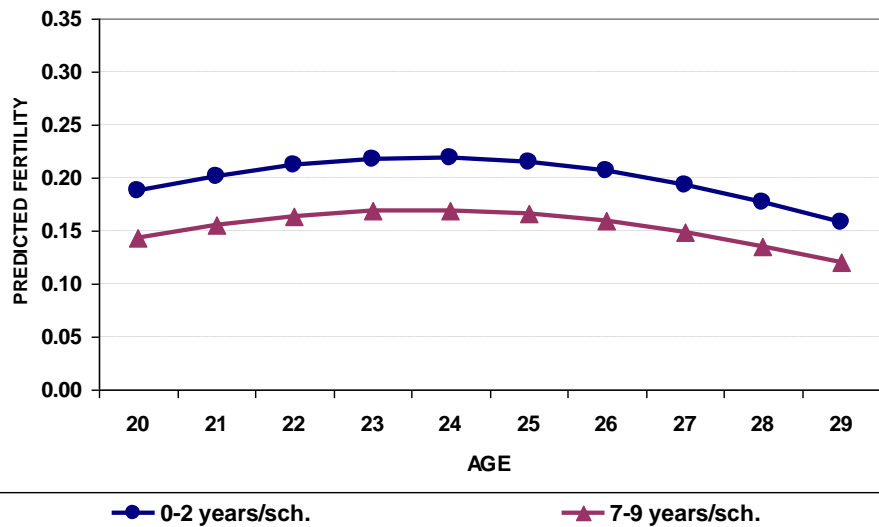


0-2 years/sch. 7-9 years/sch.

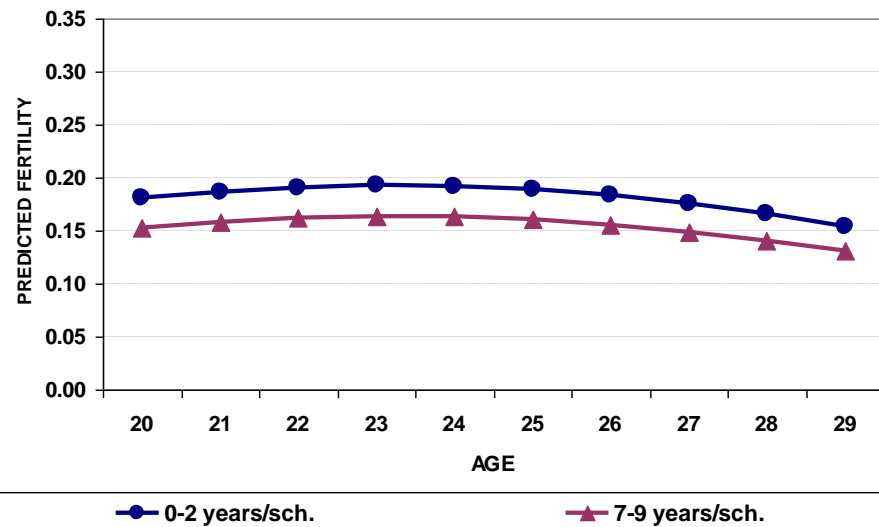
# WEALTHIER STATES & 20-29 YEARS



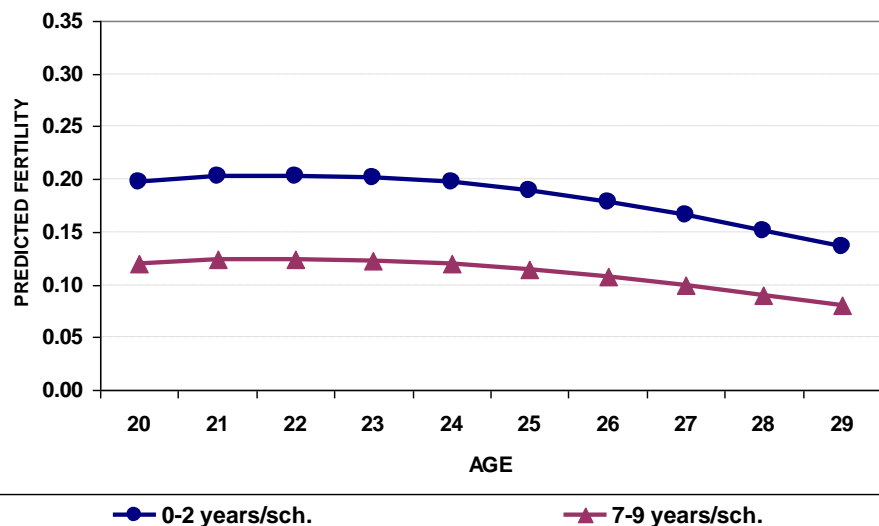
## MORELOS - MEXICO



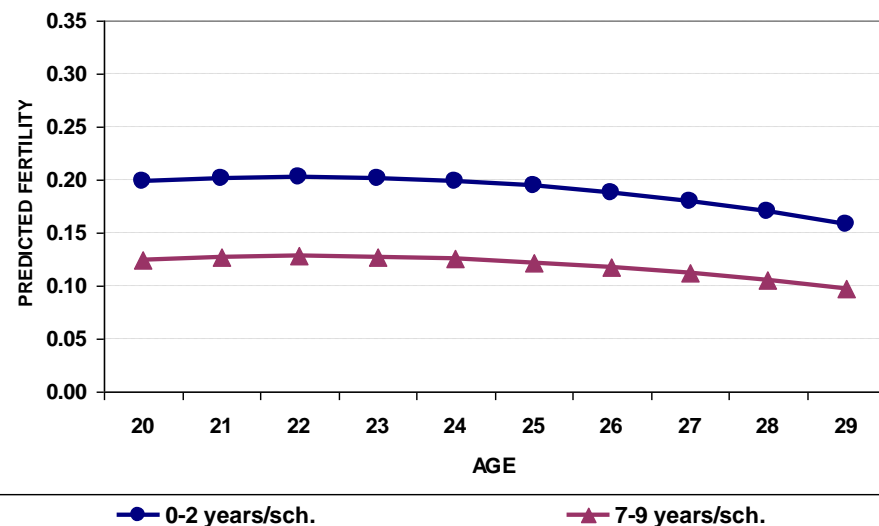
## TAMAULIPAS - MEXICO



## ESPIRITO SANTO - BRAZIL



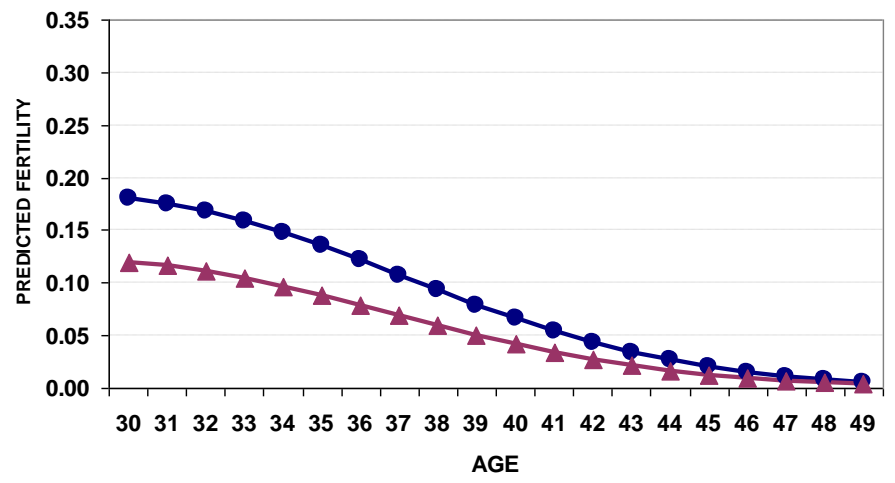
## RIO GRANDE DO SUL - BRAZIL



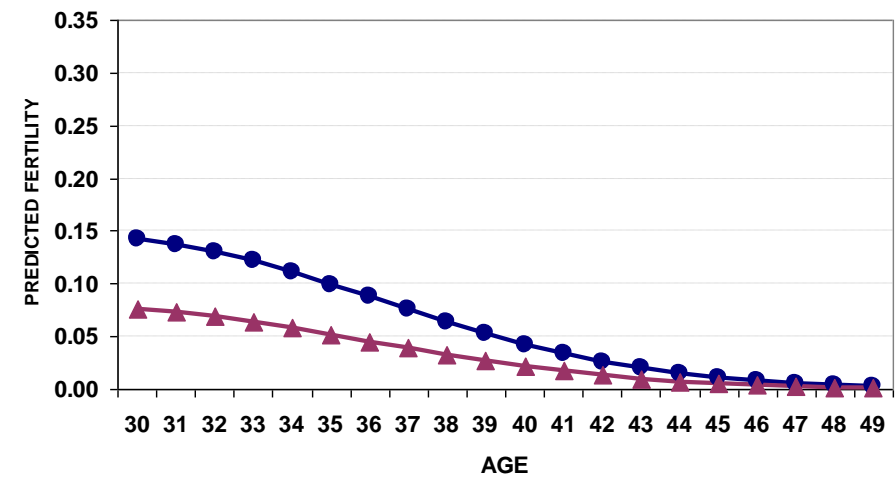
# POORER STATES & 30-49 YEARS



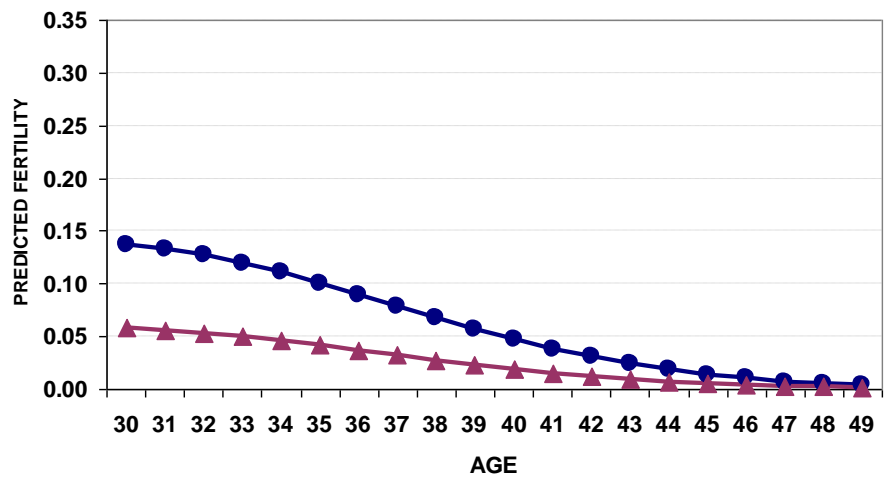
## GUERRERO - MEXICO



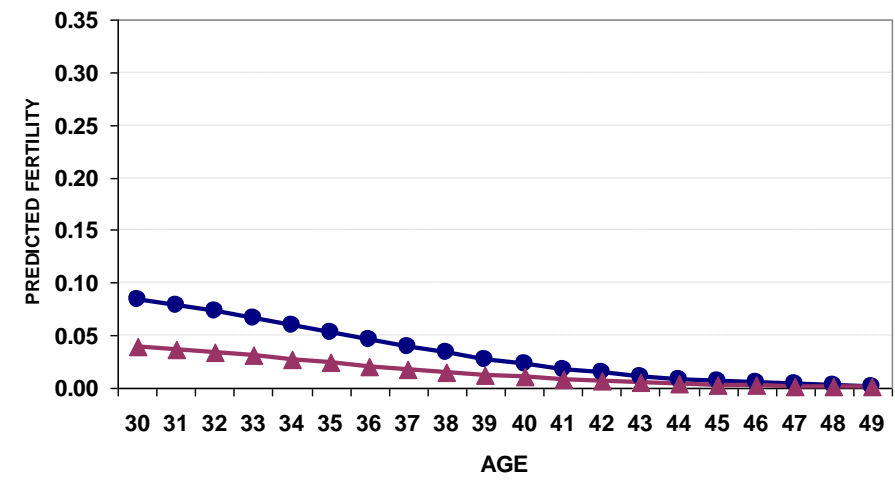
## VERACRUZ - MEXICO



## PERNAMBUCO - BRAZIL



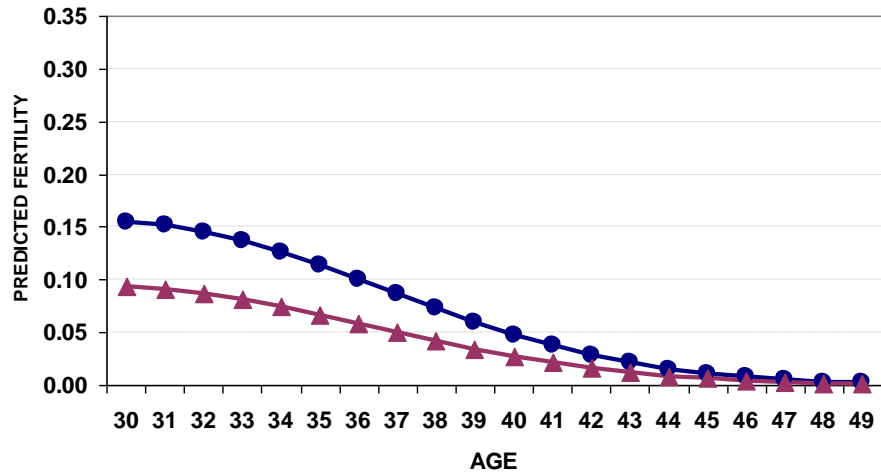
## PIAUI - BRAZIL



# WEALTHIER STATES & 30-49 YEARS

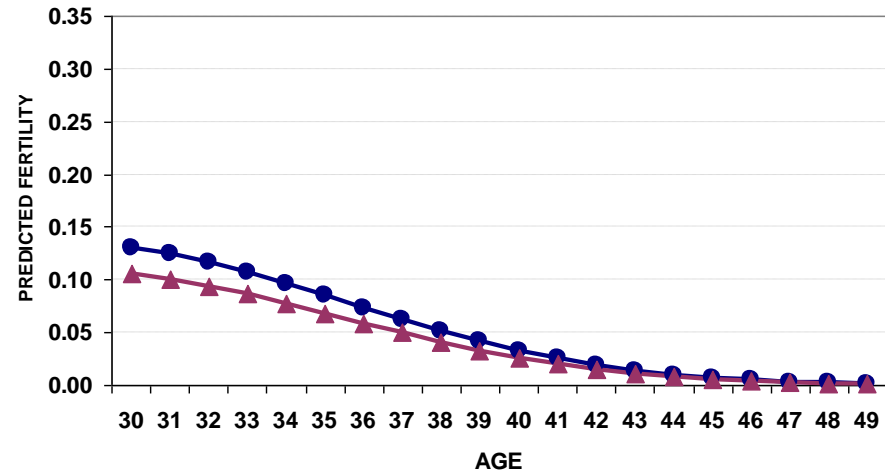


## MORELOS - MEXICO



0-2 years/sch. 7-9 years/sch.

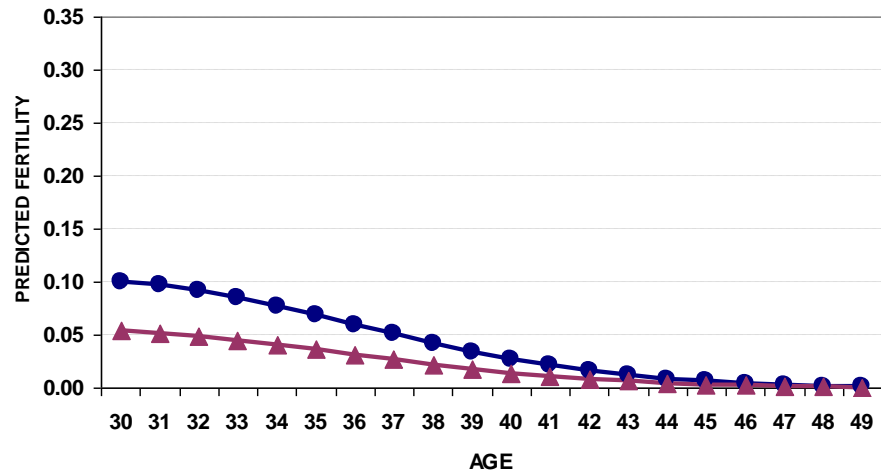
## TAMAULIPAS - MEXICO



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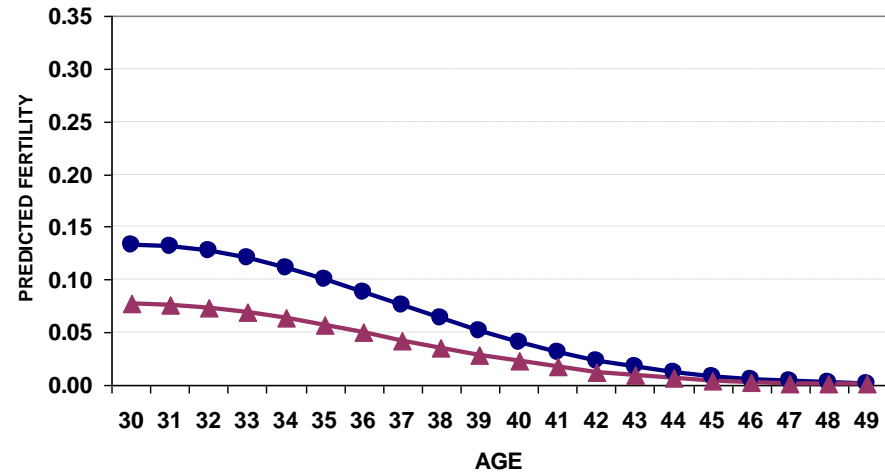


## ESPIRITO SANTO - BRAZIL



0-2 years/sch. 7-9 years/sch.

## RIO GRANDE DO SUL - BRAZIL



0-2 years/sch. 7-9 years/sch.



## DISCUSSION

- ✓ **Huge differentials in both countries, specially 15-19 age group.**
- ✓ **Does policy reduces differentials?**
  - **This influence is clearest in comparison of the richest states (20-29 and 30-49 age groups).**
  - **Poorest states also have differentials, but this pattern is complicated by higher proportion of births taken at home in Mexico.**
- ✓ **In future studies, we are going to use data about place of delivery by Mexican municipalities.**