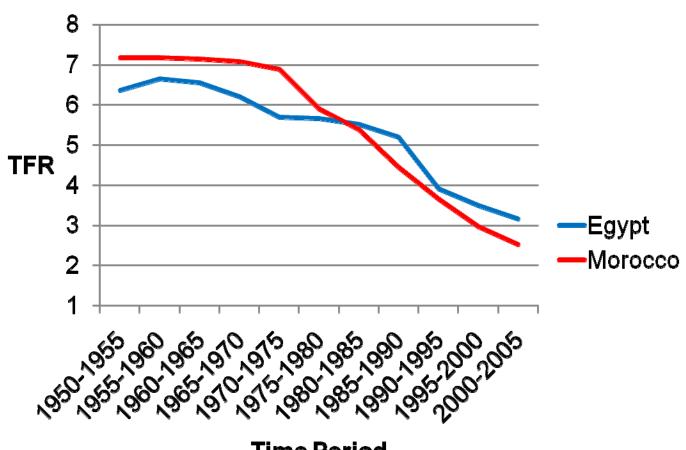
# Fertility Transition in Egypt and Morocco

Laila El-Zeini

## **Total Fertility Rate**



**Time Period** 

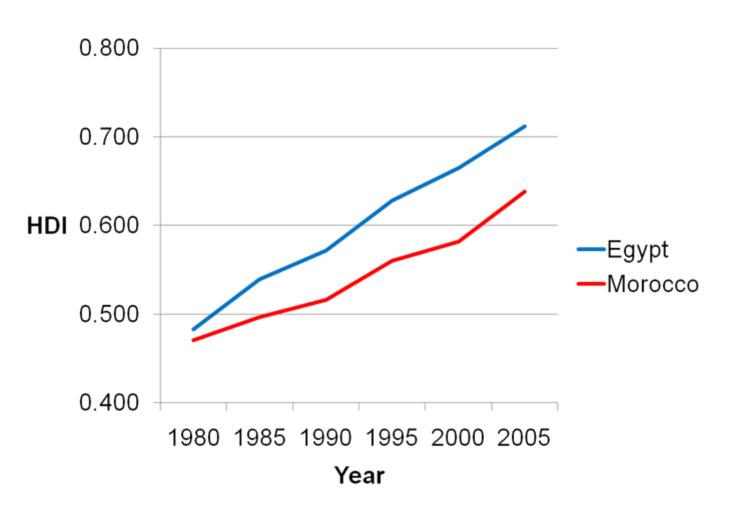
## Unexpected Difference

- Egypt started the transition earlier
- Higher education in Egypt
- Comparable economic development, with Egypt slightly ahead
- Faster improvement in child survival in Egypt

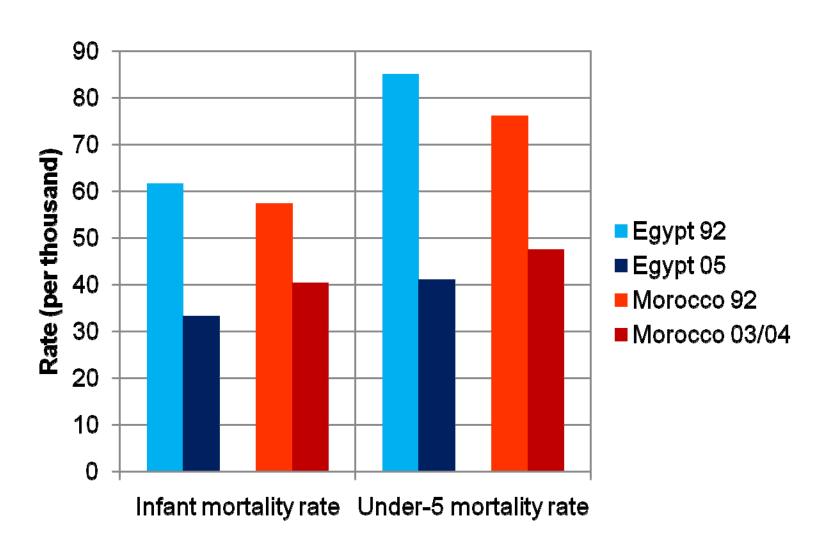
## Development Indicators in 2006

Indicator	Egypt	Morocco
Adult literacy (%)	71.4	54.7
School enrolment ratio (%)	76.4	59.6
Per capita GDP (PPP \$)	4,953	3,915

### Human Development Index



## Infant and Child Mortality



## Moving Predictions

- Berelson 1978
   Prospects of TFR reaching 2.5 in year 2000
   Egypt possible / Morocco unlikely
- Mauldin & Ross 1994
   Prospects of reaching replacement by year 2015

Both *probable*, but prospects *higher in Egypt* 

United Nations Population Prospects 2008
 Period where fertility expected to reach replacement (projected TFR = 2.07)

Egypt 2035-2040 / Morocco 2020-2025

## Potential Explanations?

- Migration streams
- Diffusion from neighboring, more developed, countries
- Changes among the "leaders"
- Late marriage

## Issues with Available Explanations

- Focus on cross-sectional differences not on differences in pace of change
- The links from macro differences to micro decision-making are ignored
- Unwarranted inference of attitudes from behaviours

## Decomposing Fertility Differences

- Nuptiality / Marital fertility rates
- 2. Wanted / Unwanted fertility
  - Wanted: Limiting / Spacing
  - Unwanted: Non-use /Discontinuation /Failure
- 3. The leader-follower model (educational differentials)

#### Data

 Two DHS surveys for each country Egypt: 1992 & 2005
 Morocco: 1992 & 2003/04

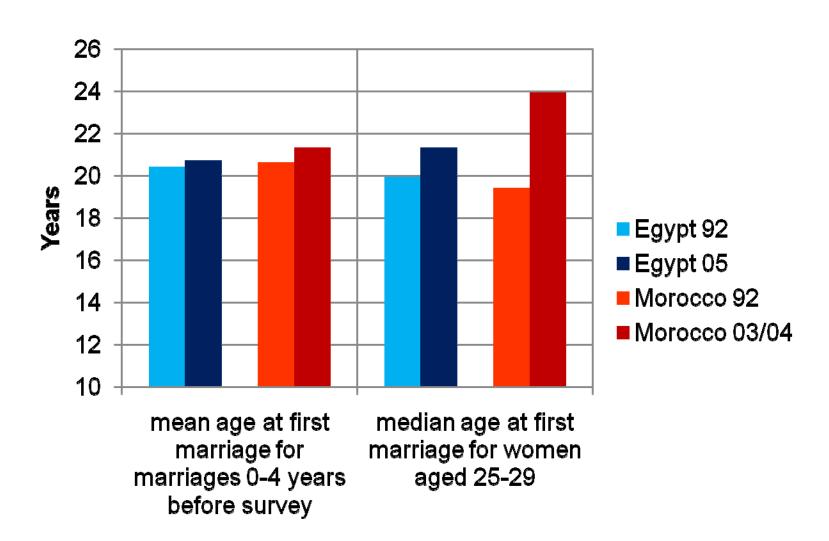
 Question: why is the pace of fertility transition faster in Morocco?

 Main comparison: country differences in the <u>change</u> in TFR across time

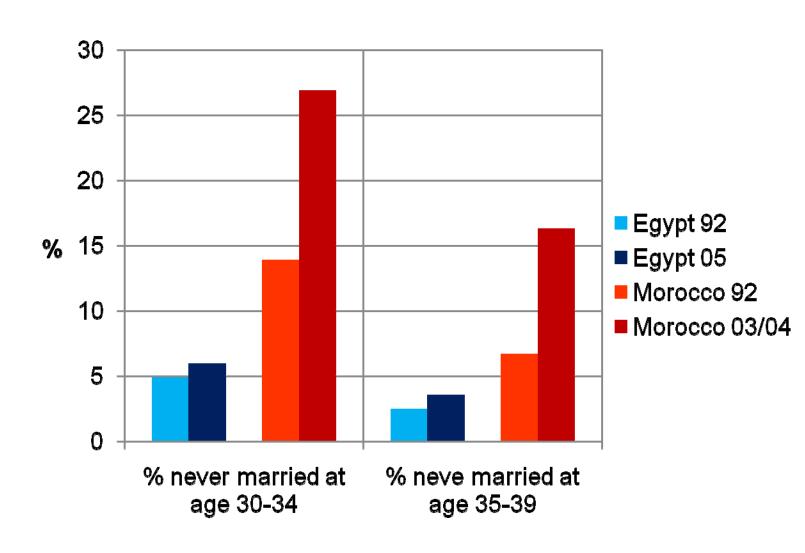
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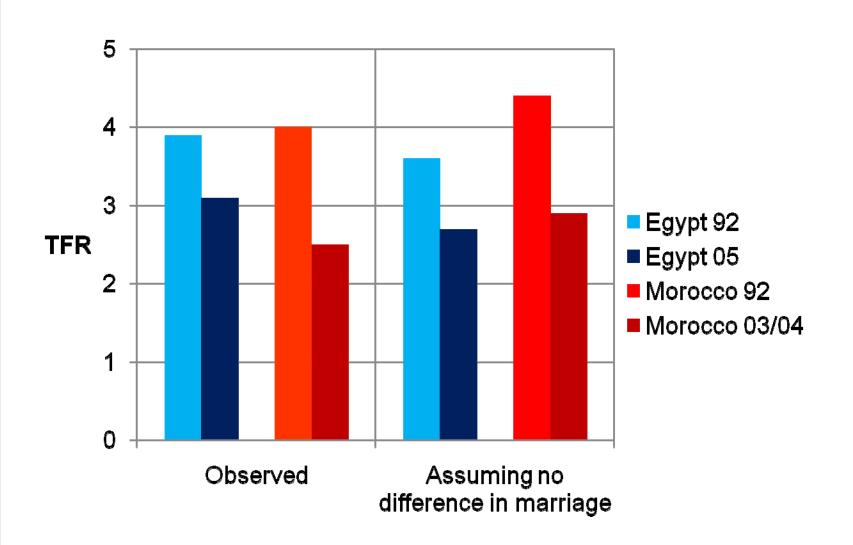
## Nuptiality: Age at First Marriage



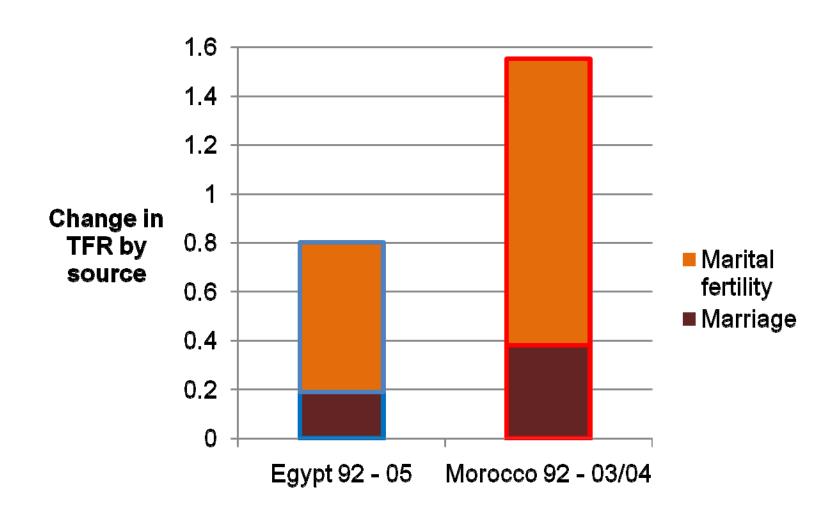
## **Nuptiality: Celibacy**



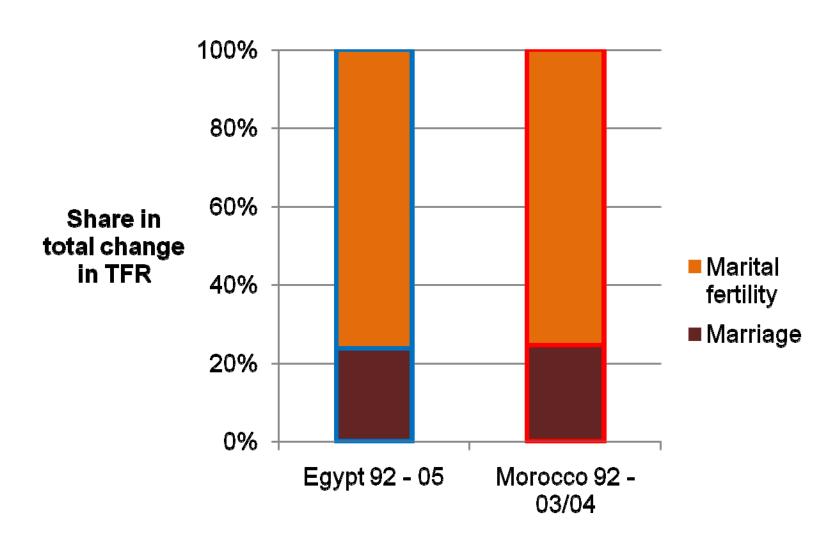
## Effect on Fertility



## Marriage or Marital Fertility?



## Marriage or Marital Fertility?



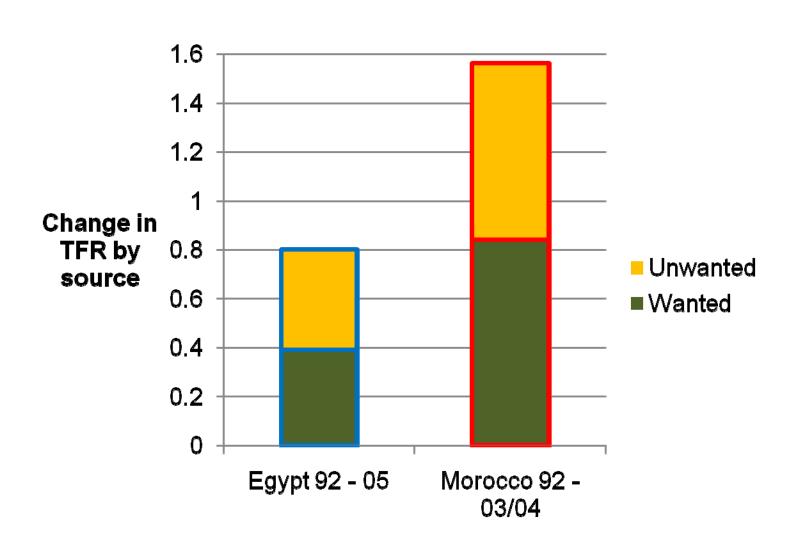
#### Conclusion 1.

 Although marriage explains the difference in TFR between the two countries, it does not account for the difference in the pace of fertility transition

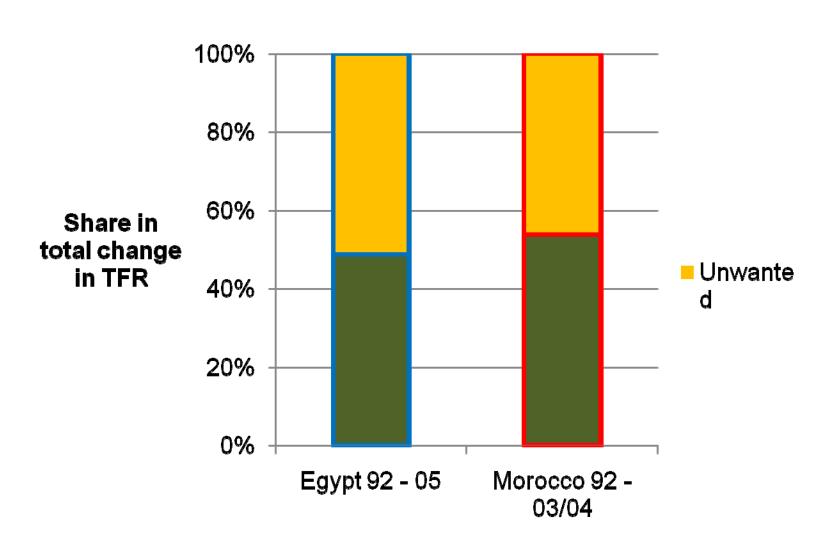
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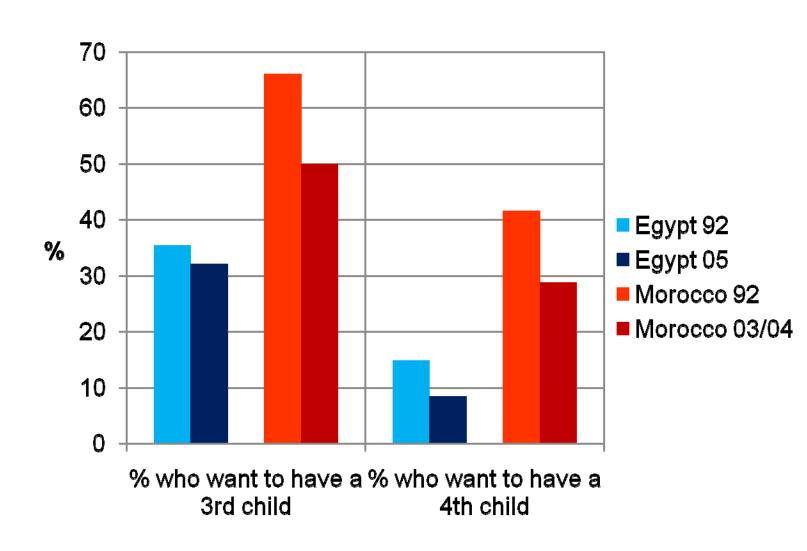
## Wanted or Unwanted Fertility?



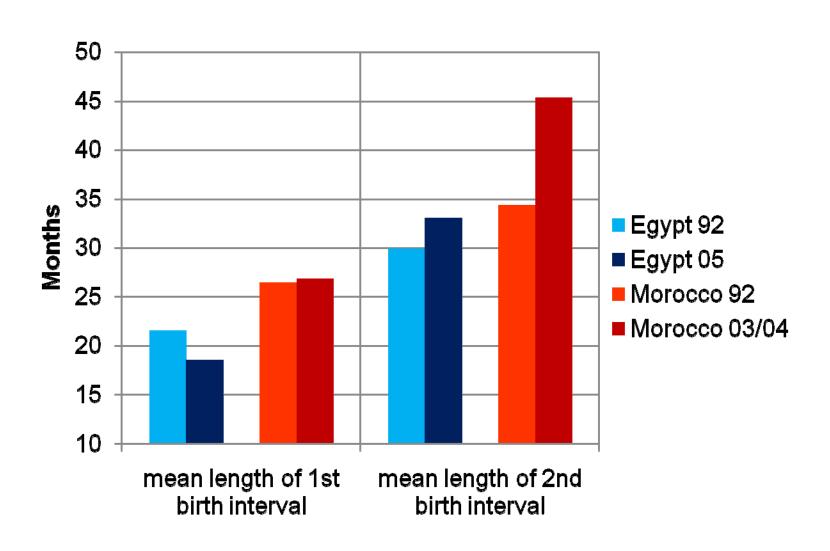
## Wanted or Unwanted Fertility?



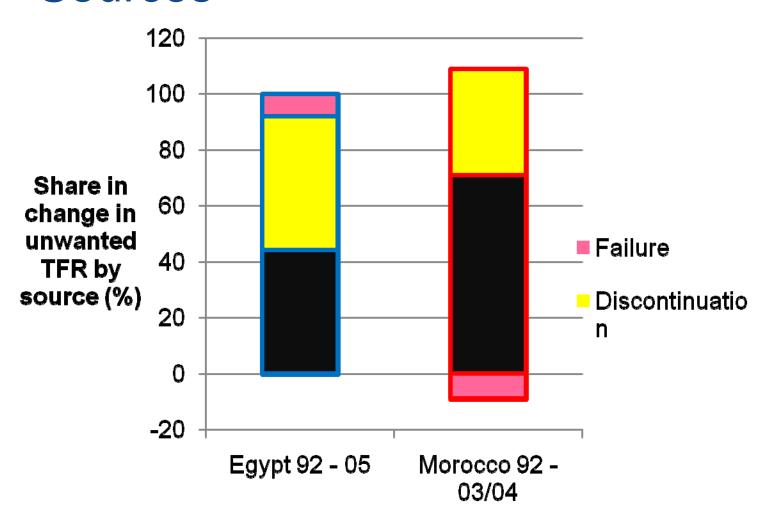
## Wanted Fertility: Limiting



## Wanted Fertility: Spacing



## Change in Unwanted Fertility: Sources



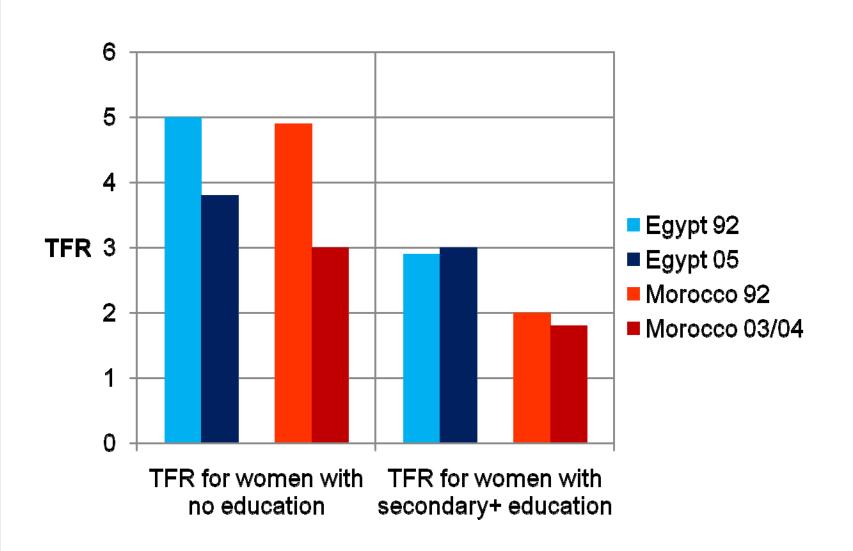
#### Conclusion 2.

- Fertility preference is changing more in Morocco than in Egypt. But desired family size is still higher in Morocco.
- Both wanted and unwanted TFR are declining in Morocco because of the postponement of the two first births.
- Egyptian women are becoming more capable of controlling unwanted fertility through better family planning practices.

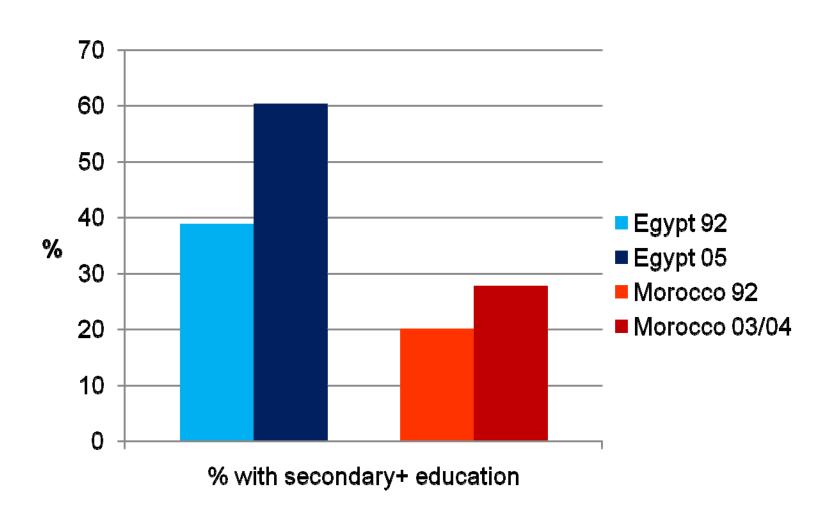
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#### **Educational Differentials**



## **Educational Composition**



#### Conclusion 3.

- The pattern of educational differentials suggests a scope for further declines in Morocco.
- The change in educational composition in Egypt makes it hard to predict future trends.

## **Concluding Remarks**

- The low level of TFR in Morocco is mainly due to postponement of births + the effect of celibacy or very late marriage
  - → Causes and consequences?
  - → Is it temporary response to economic stagnation? Will it continue in the future?
- Change in attitudes as an outcome of change in behaviour
- Lagged effects of high unemployment in Egypt

## Two Alternative Stories

 Morocco -- fast modernization; diffusion of small family-size ideals

Egypt -- stagnation; increasing conservatism

2) Morocco -- fast but volatile

Egypt -- slow but sure

## The More Likely Scenario

Morocco:

Continuation of the decline but at a slower pace

• Egypt:

Acceleration of the fertility decline