

# Mortality and Fertility Decline

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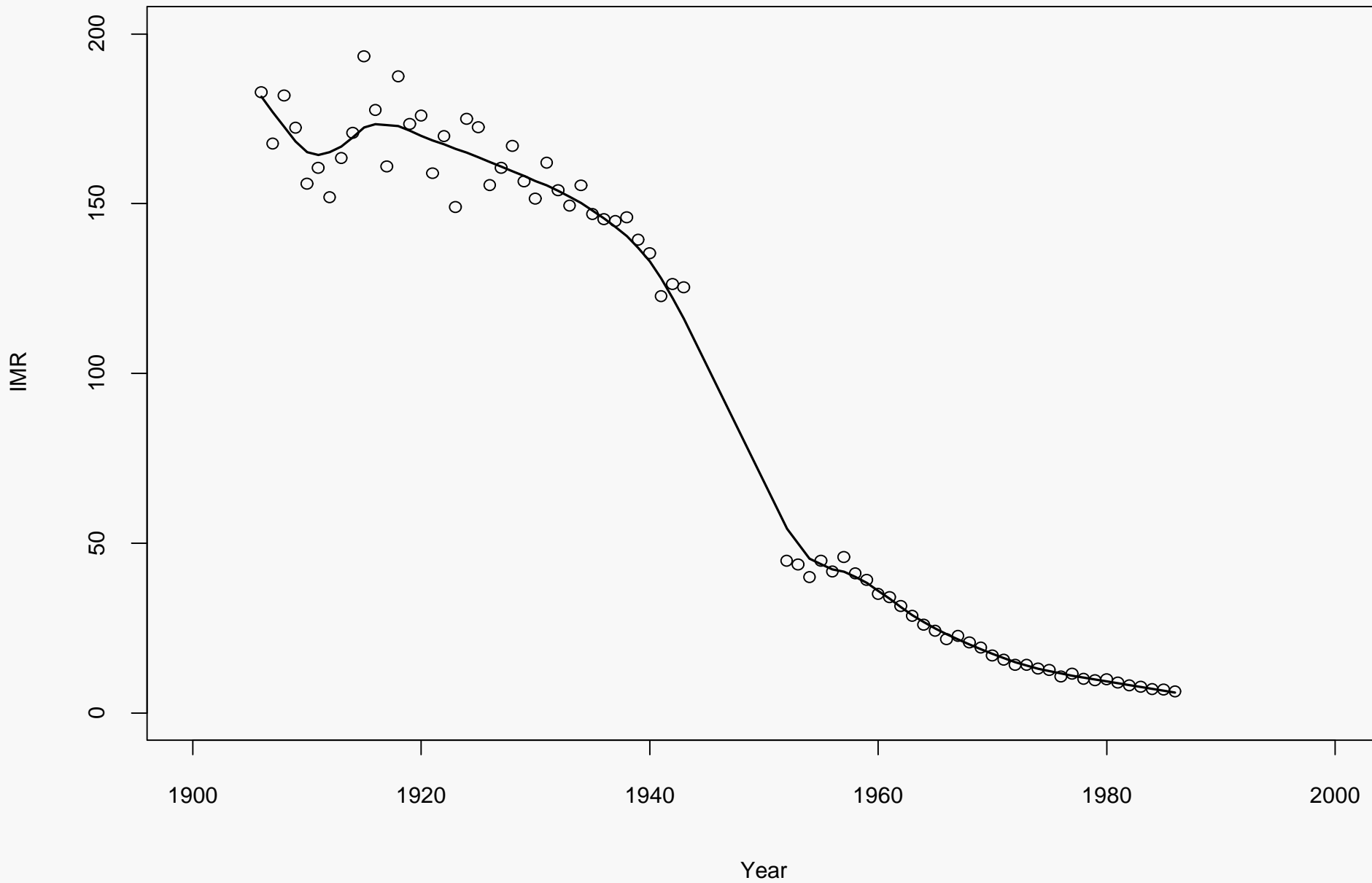
# Understanding Fertility and Mortality Decline

- Crude birth and death rates are useful as components of population growth rates, but less so as indicators of fertility and mortality levels
- To study changing fertility levels we prefer to look at the *total fertility rate* (TFR)
- To study changing mortality levels we prefer to look at the *infant mortality rate* (IMR)

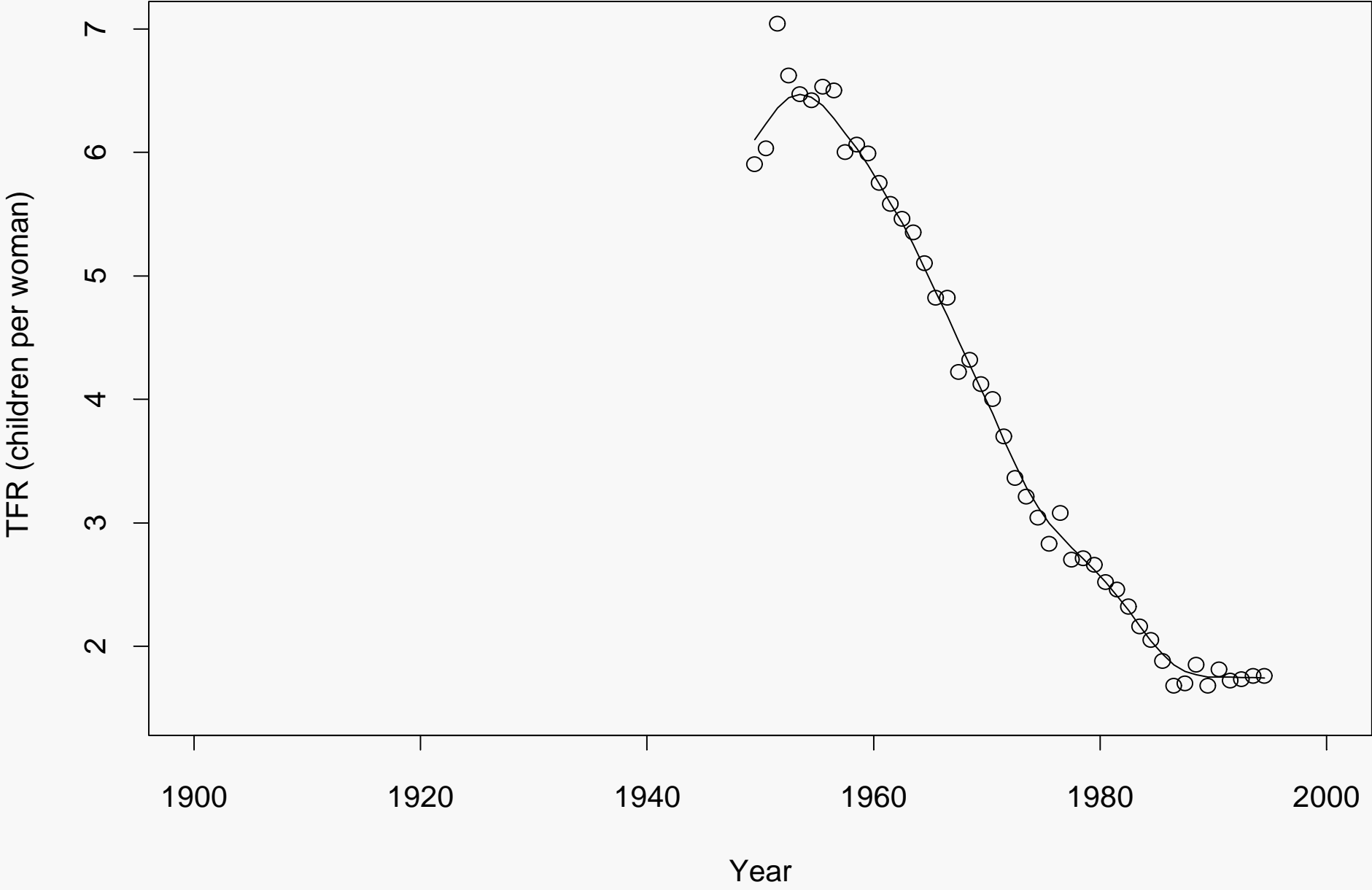
# Fertility and Mortality Decline in Taiwan

- Total fertility rates and infant mortality rates demand more of data than crude birth and death rates
- Generally we can't obtain as long time series
- For Taiwan we have IMRs from 1906, but TFRs only from 1949

Taiwan Infant Mortality Rate, 1906-1986



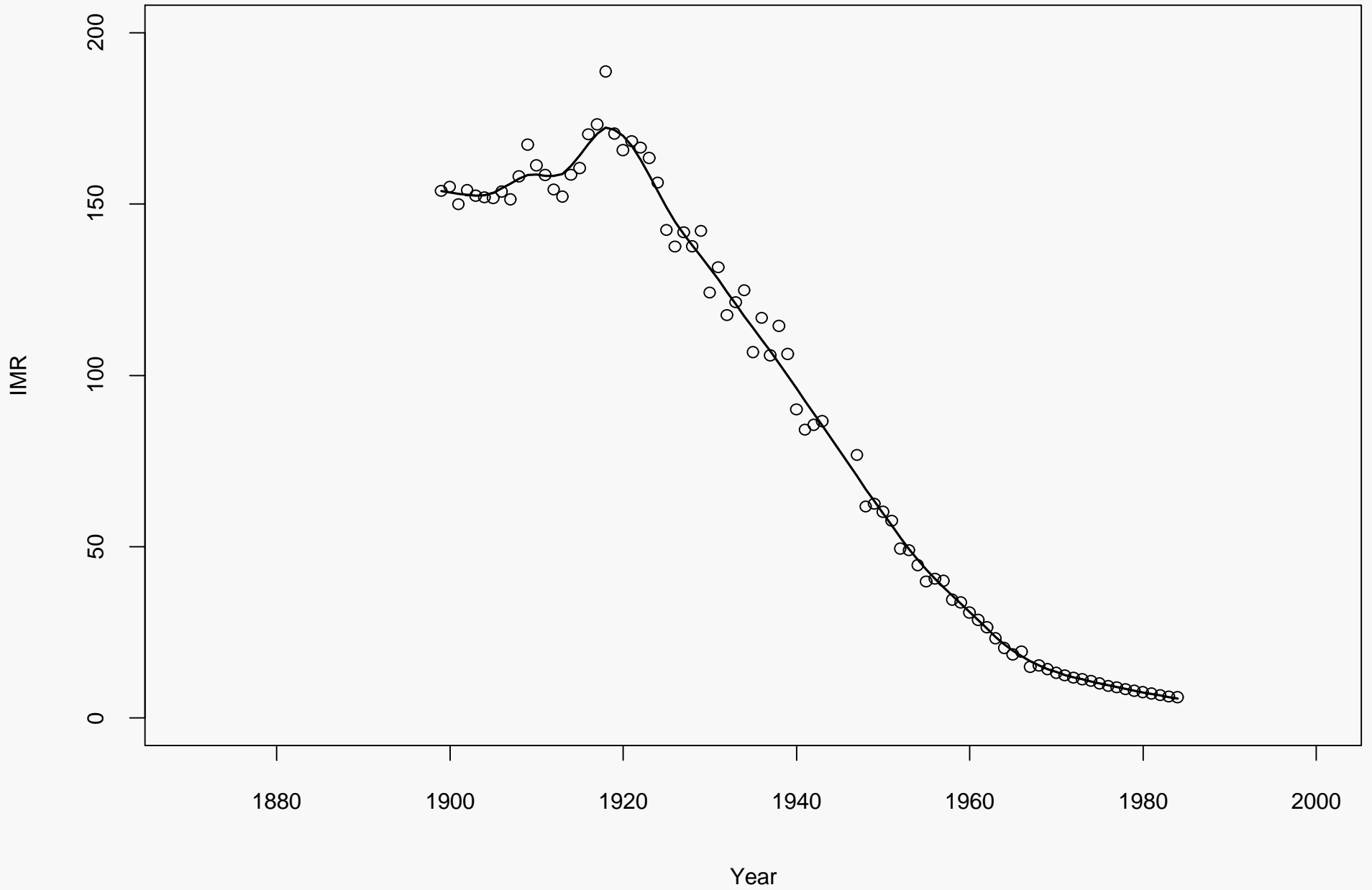
# Total Fertility Rate



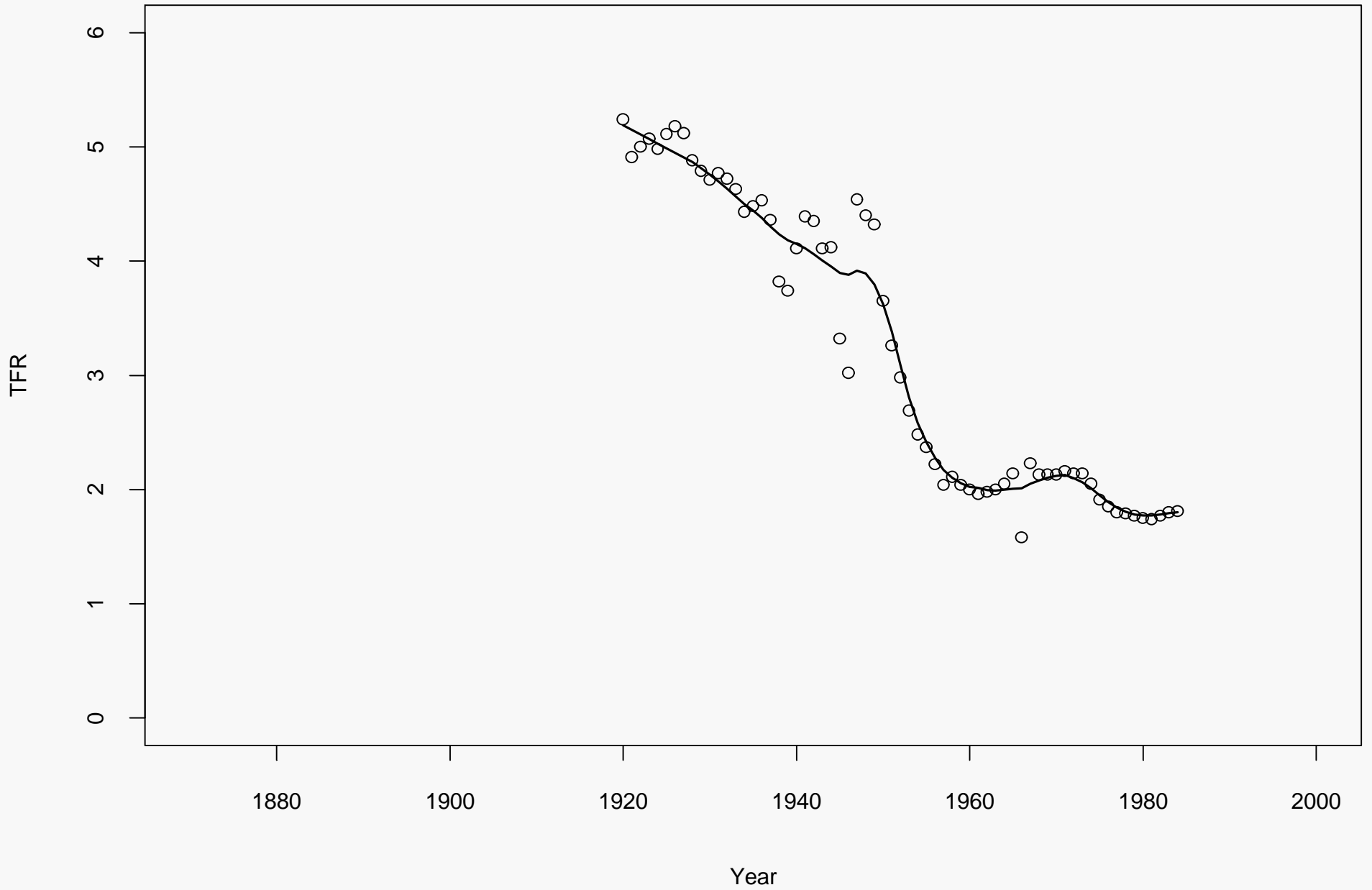
# Fertility and Mortality Decline in Japan

- Next we look at times series of infant mortality rates and total fertility rates for Japan
- Compare the levels and patterns of change with those observed for Taiwan
- What similarities? What differences?

# Japan Infant Mortality Rate



Japan TFRs, 1920-1984

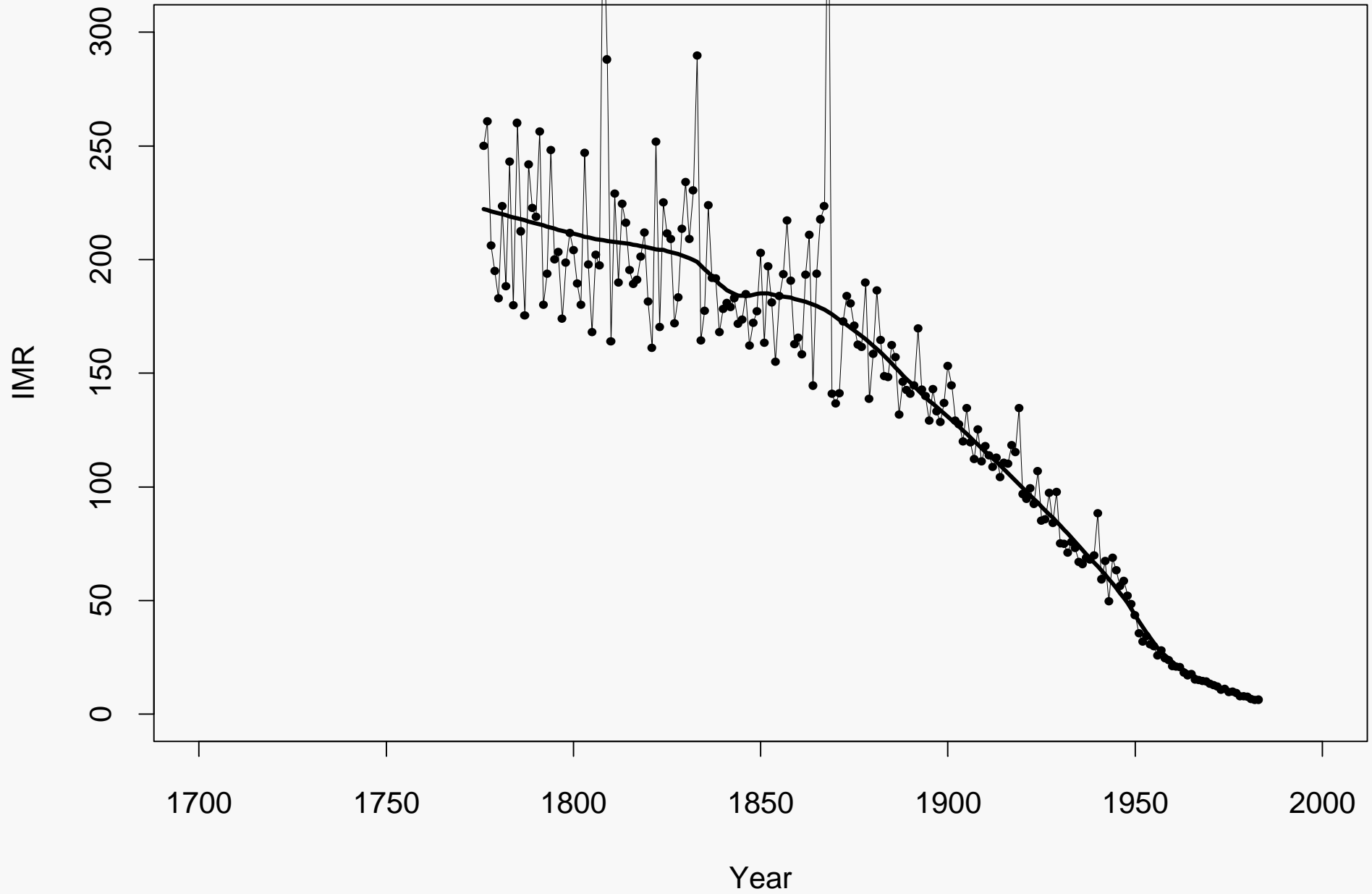




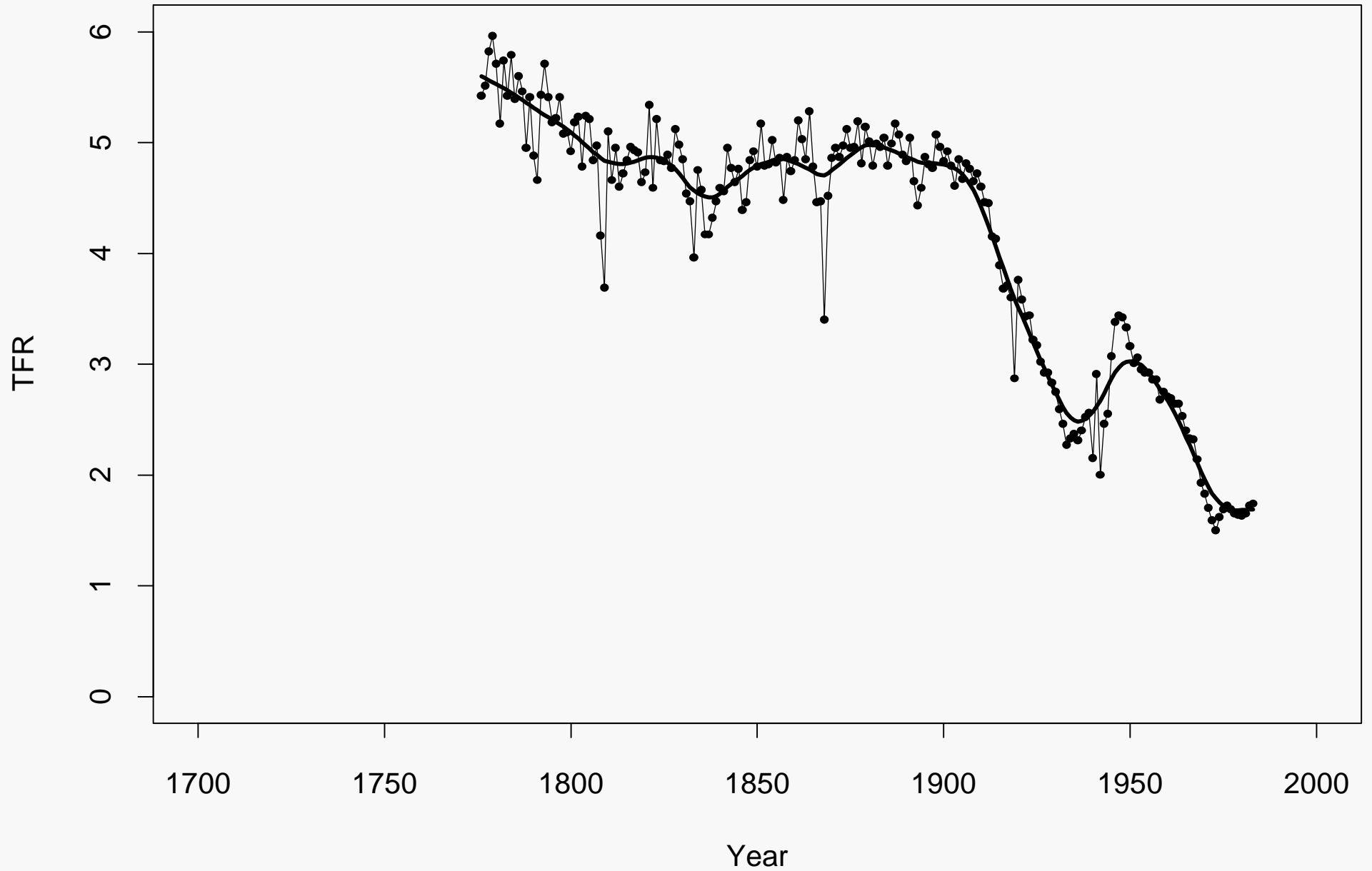
# Fertility and Mortality Decline in Finland

- Finally, let's compare these two Asian countries with a European country, Finland
- Times series available for Finland are long, but nearly as long as the crude birth and death rate series
- Compare these series with those for Taiwan and Japan; also with the CDR and CBR series for Finland; what do you learn?

# Finland Infant Mortality Rates: 1776-1983



# Finland Total Fertility Rates: 1776-1983



Questions?  
Comments?  
Discussion?