

# Fertility Prospects in China

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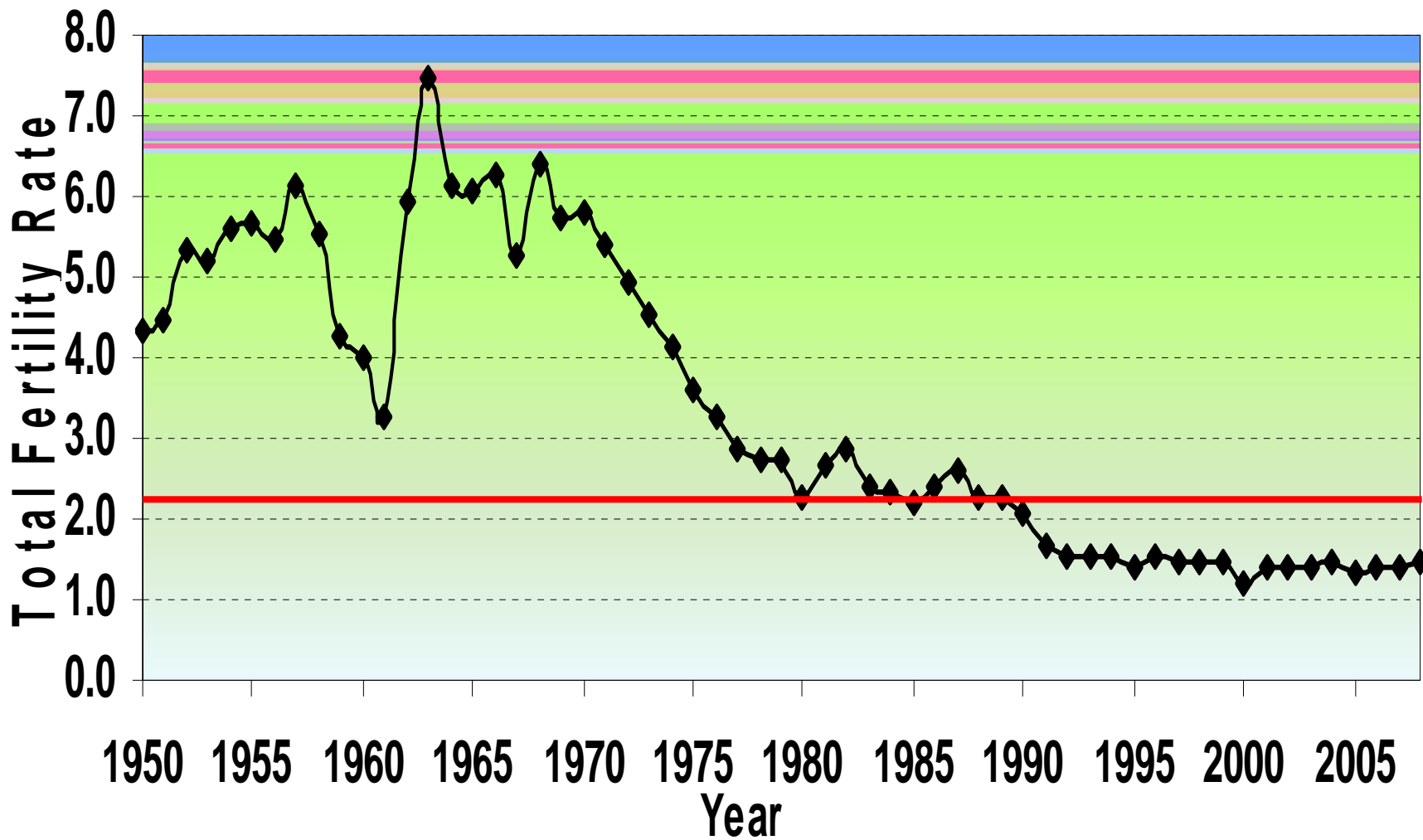
# Issue of Fertility Estimation

- **WPP 2009: 1.77 (China)**
- **From “official estimate”**
- **NPFPC versus NBS**
- **Review the trend since 1990s**
- **Explain reasons behind**
- **Discuss the implications**

# Fertility Trend in China

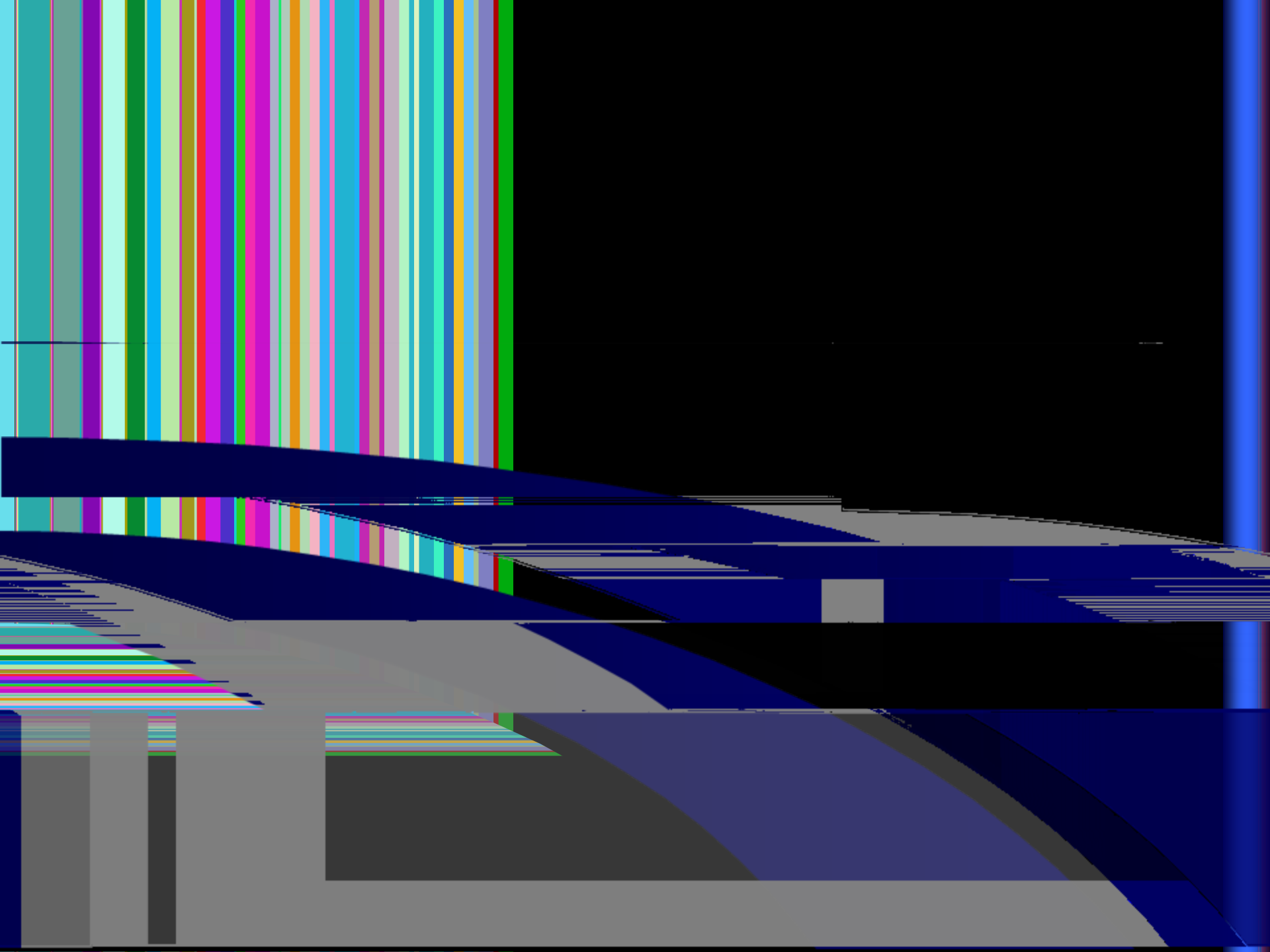
- **1950s: Women's emancipation**
- **1970s: "Later, Sparser, Fewer"**
- **TFER from 5.81 (1970) to 2.72 (1978)**
- **1980: Open Letter for one child**
- **Early 1990s: below replacement**
- **Now: about 1.5, among the lowest**

# Total Fertility Rate in China: 1950 - 2008



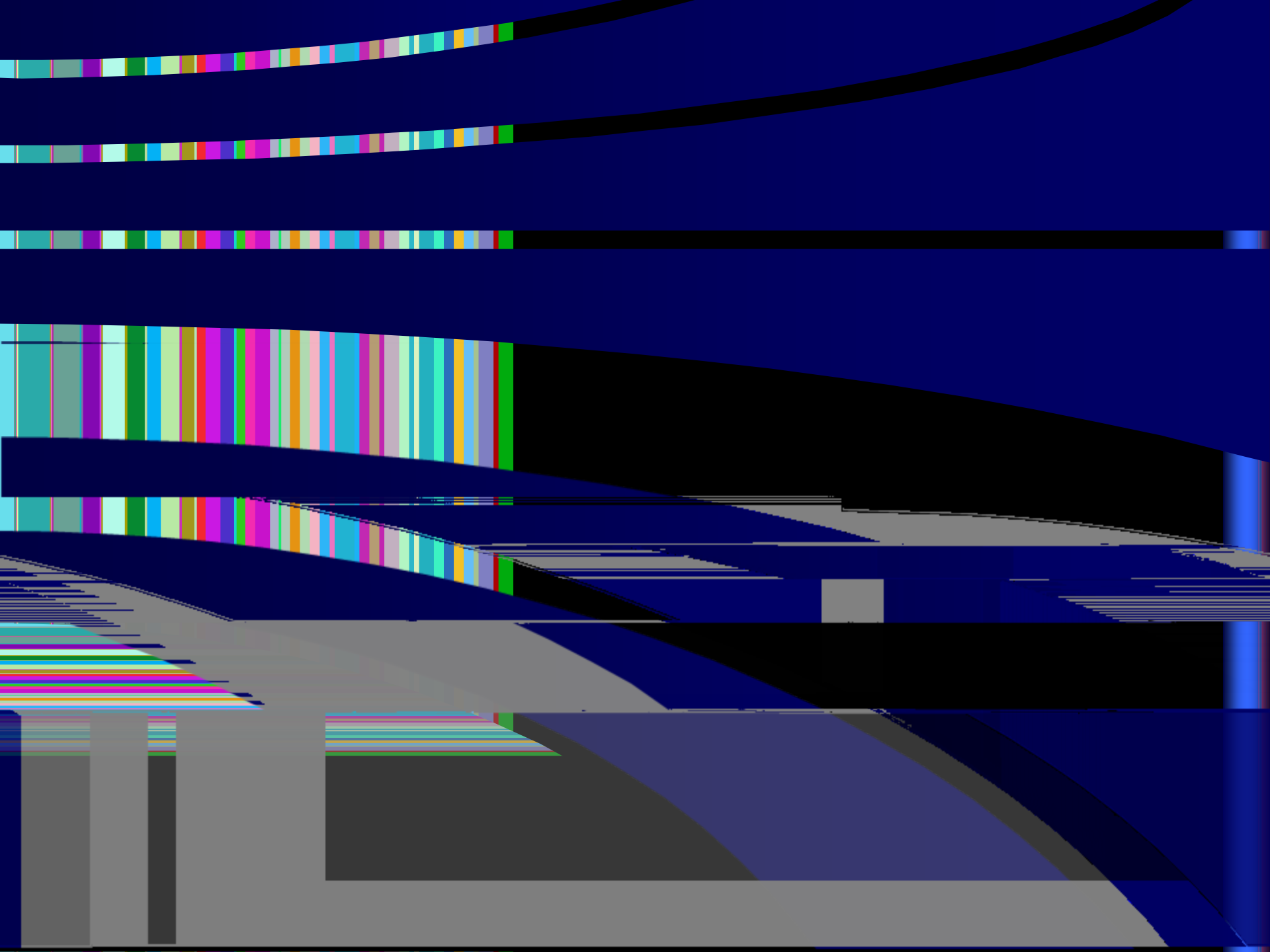


- **Resistance to one-child policy**

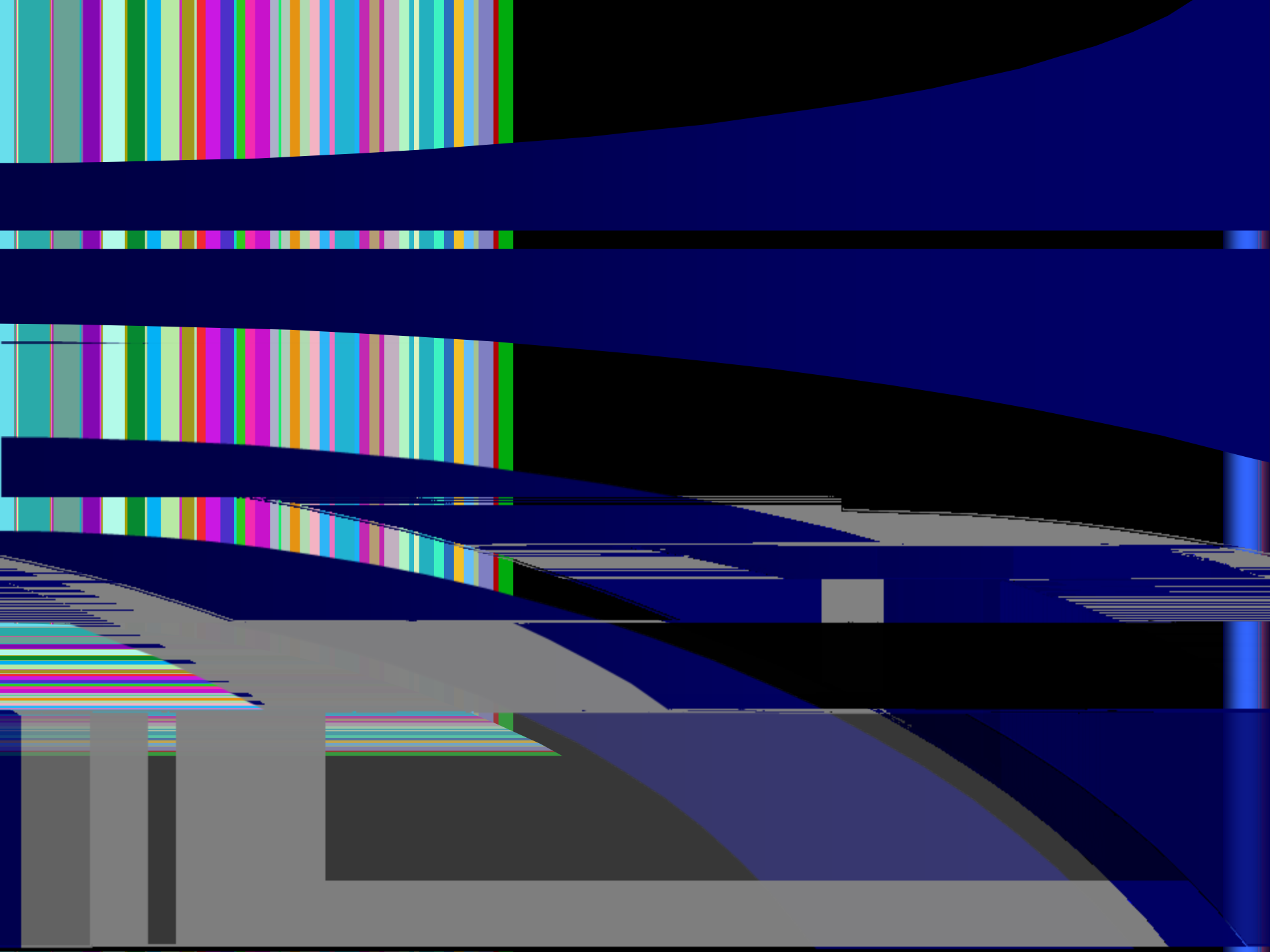


# Issue of Underreporting

- **Economic and social liberalization**
- **Continue draconian birth control**
- **Concern of births underreporting**



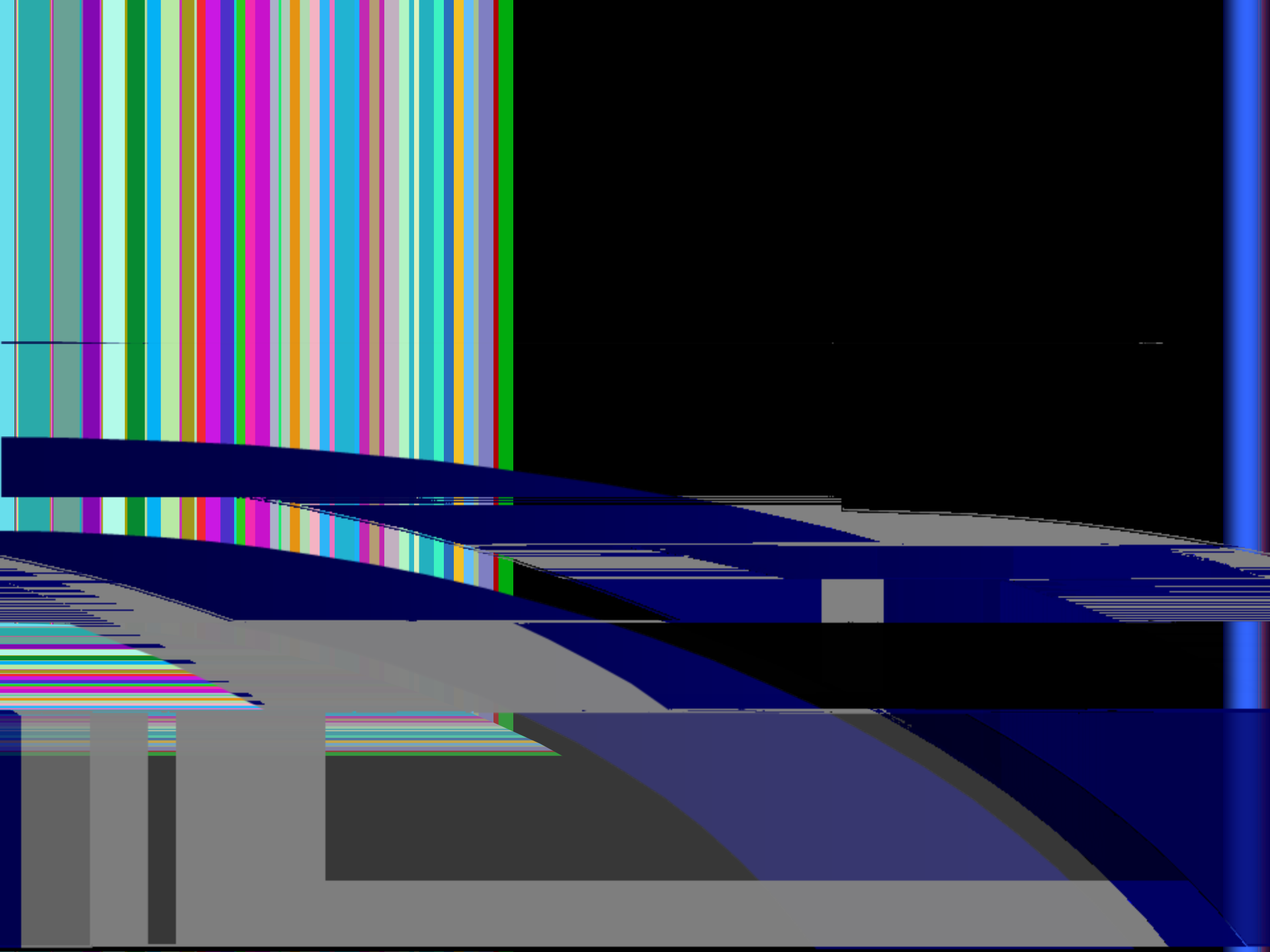


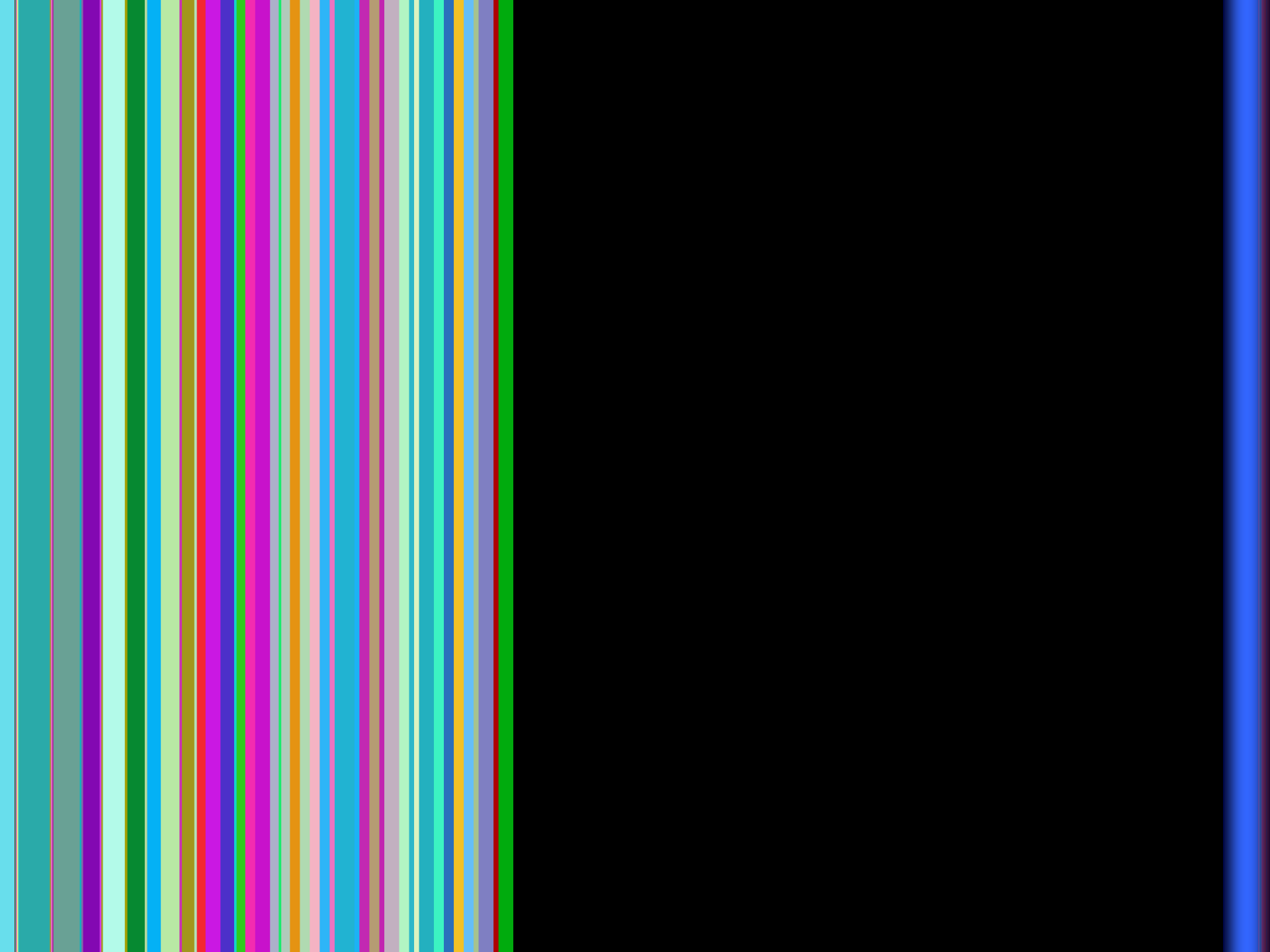




# Fertility Decline in China

- **1970s: sustained rapid decline from 6**
- **1980s: fluctuated around 2.5**
- **1990s: further decline to well below 2.1**





# Fertility Estimate by Different Sources

- **Higher estimate by school enrollment data: due to over estimate induced from economic incentives, increasing migration, change in education system and age structure**
- **Upward result in 2006 survey: due to under-sampling of young-unmarried**

# Fertility Estimate by Different Methods

- **Around 1.6 in 2000 (Zhang-Zhao)**
- **1.47 in 1997-2000 (Retherford et al.)**
- **1.5-1.6 in the 1990s (Cai)**
- **Similar conclusion: Guo, Guo-Chen, Morgan-Guo-Hayford**

- **Studies: around 1.5**



# Reasons to Be So Low

- **Fertility policy - not always work**
- **Social change - to encourage fewer**
- **Tempo effect – period lower than cohort**
- **Changes in attitude and behavior**
- **Modern contraceptive services**







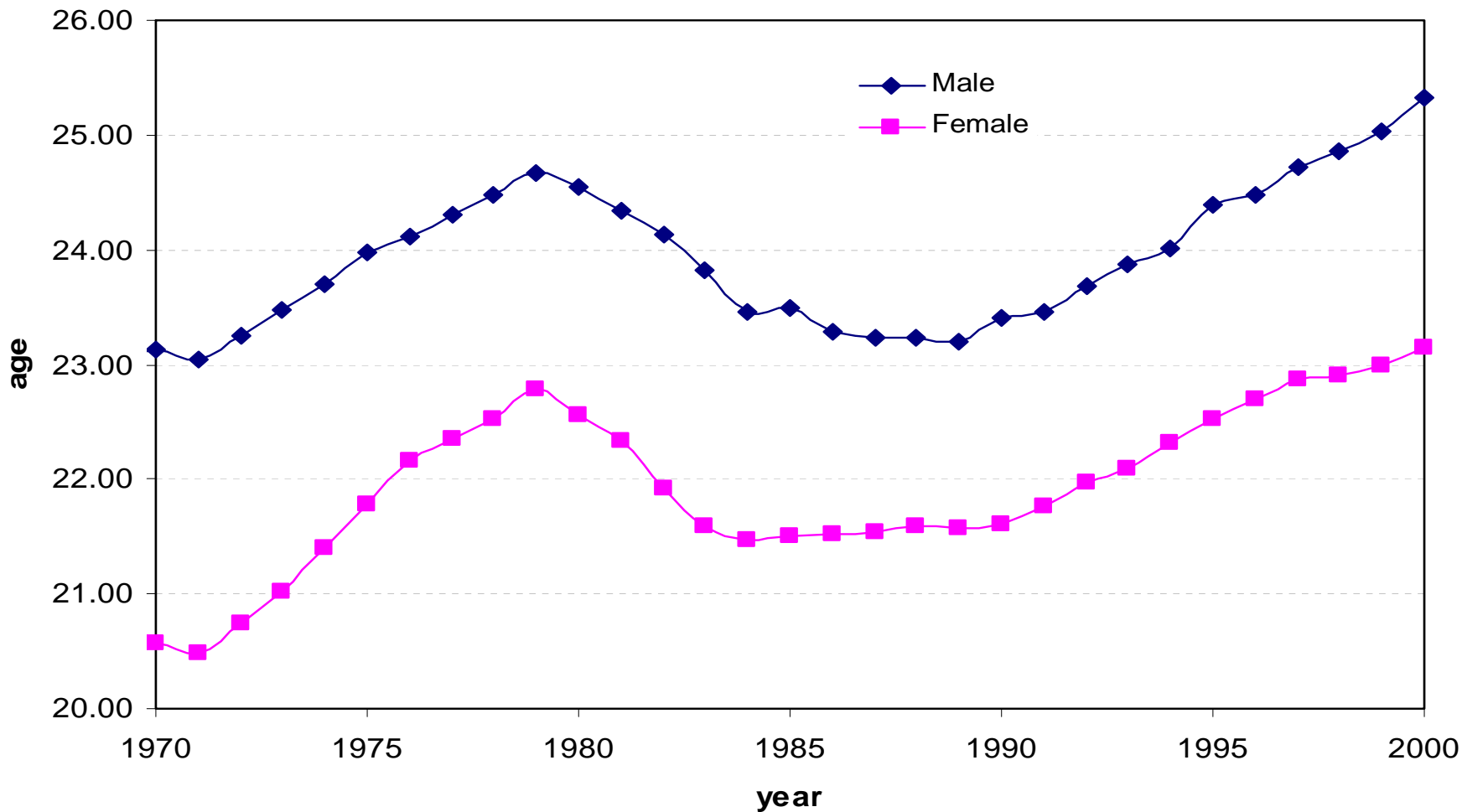
# Reasons for Limiting to One Child

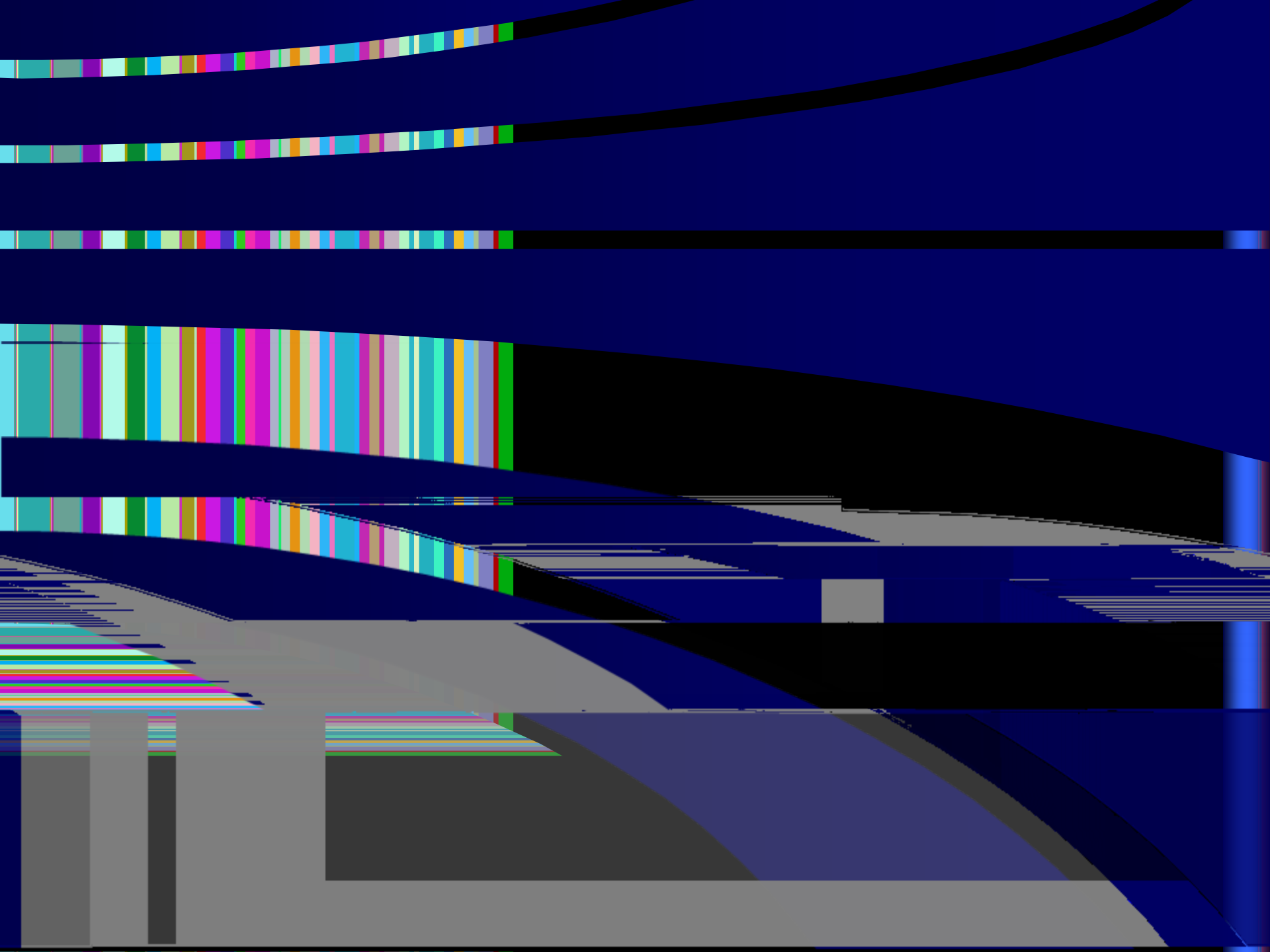
- **Uncertain future**
- **Cost of having children**
- **Unfriendly environment to reproduction**
- **Rising demand for “human capital”**
- **Retrenchment of public support**
- **Concentrate for few but successful**

# Low Fertility Proximate Determinants

- **Relatively low “unwanted fertility”**
- **Son preference via sex-selective abortion**
- **Infecundity and sub-fecundity**
- **Delayed marriage and childbearing**

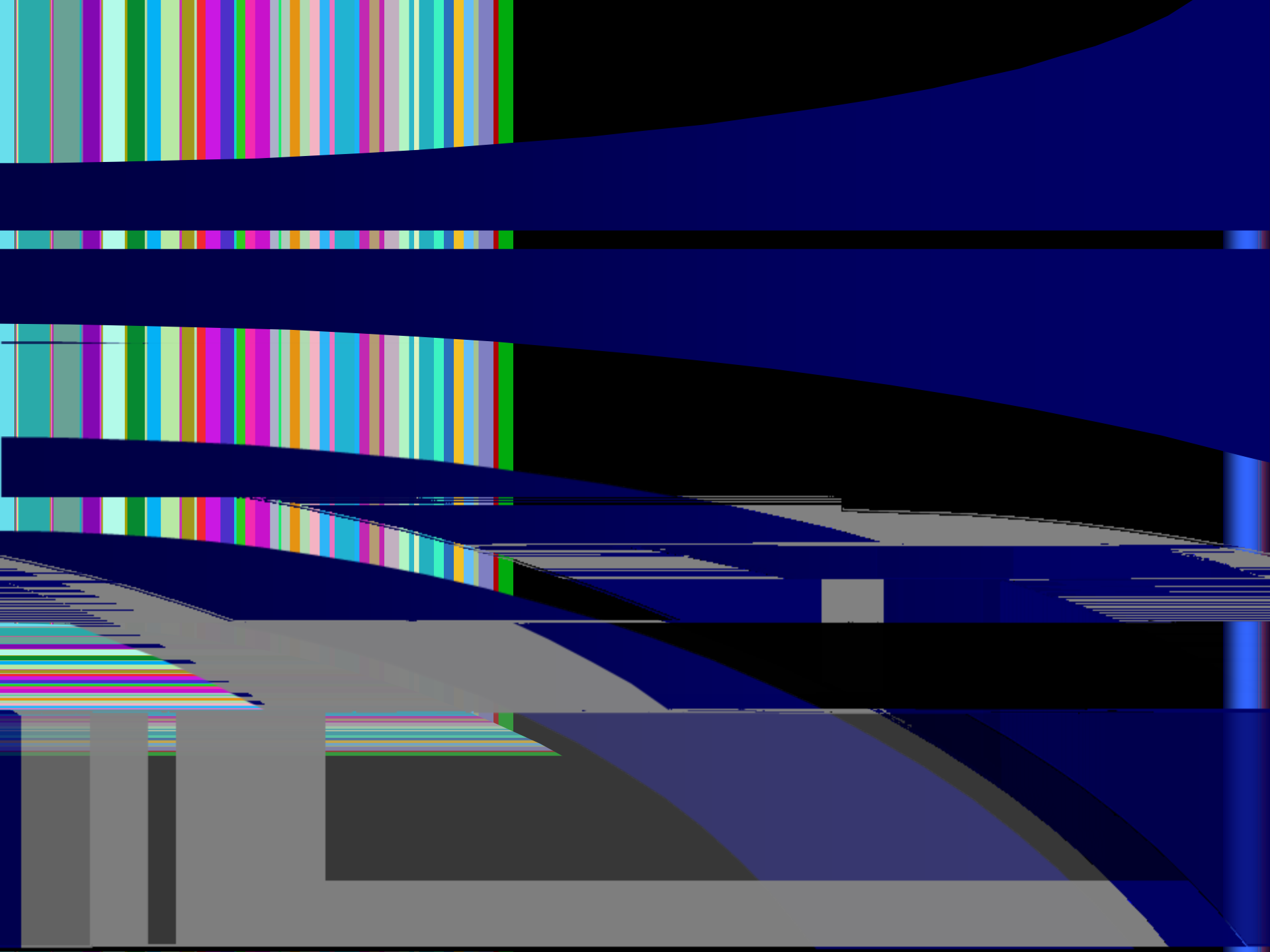
# Mean Age at First Marriage by Sex, China 1970-2000







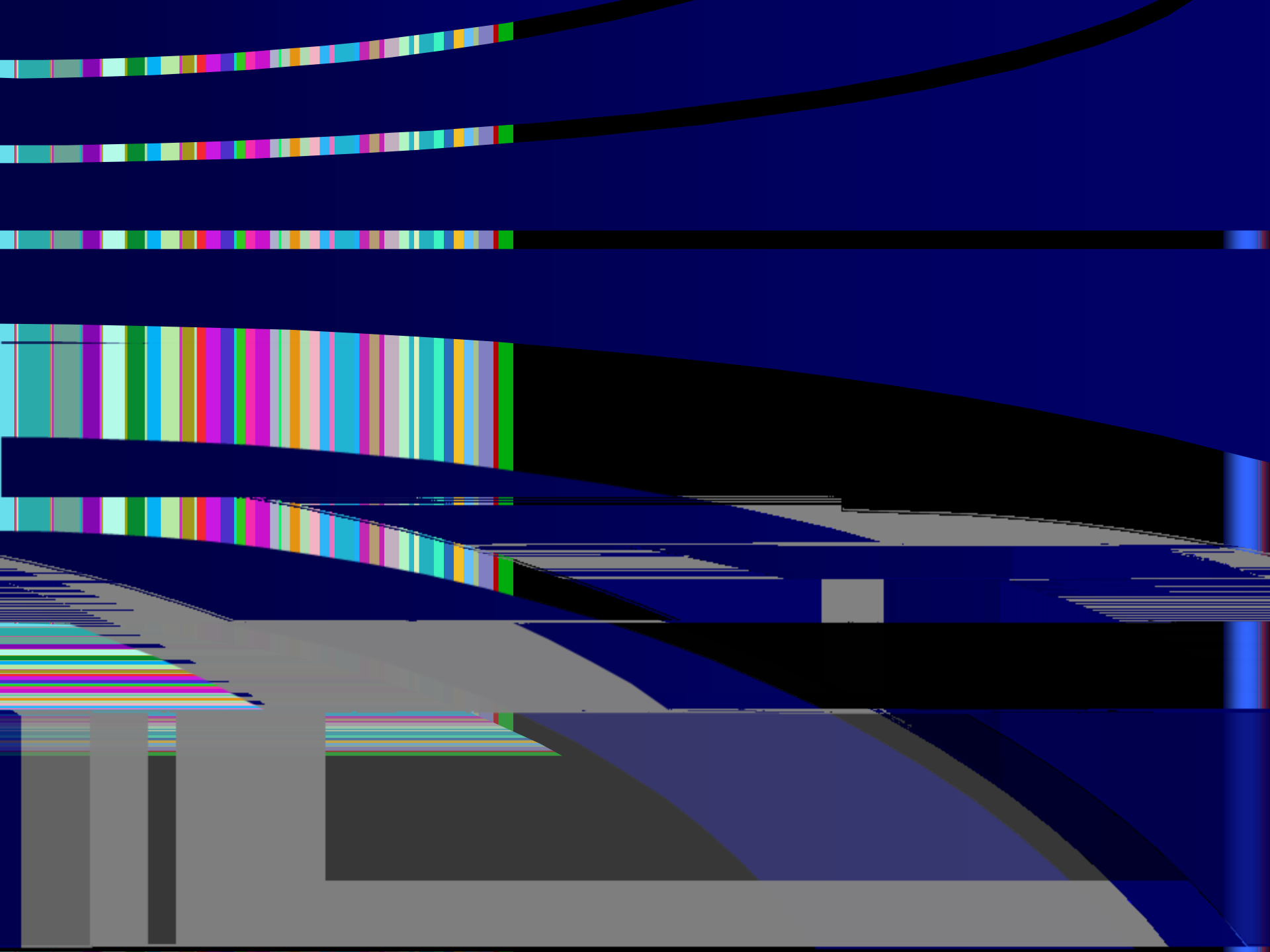




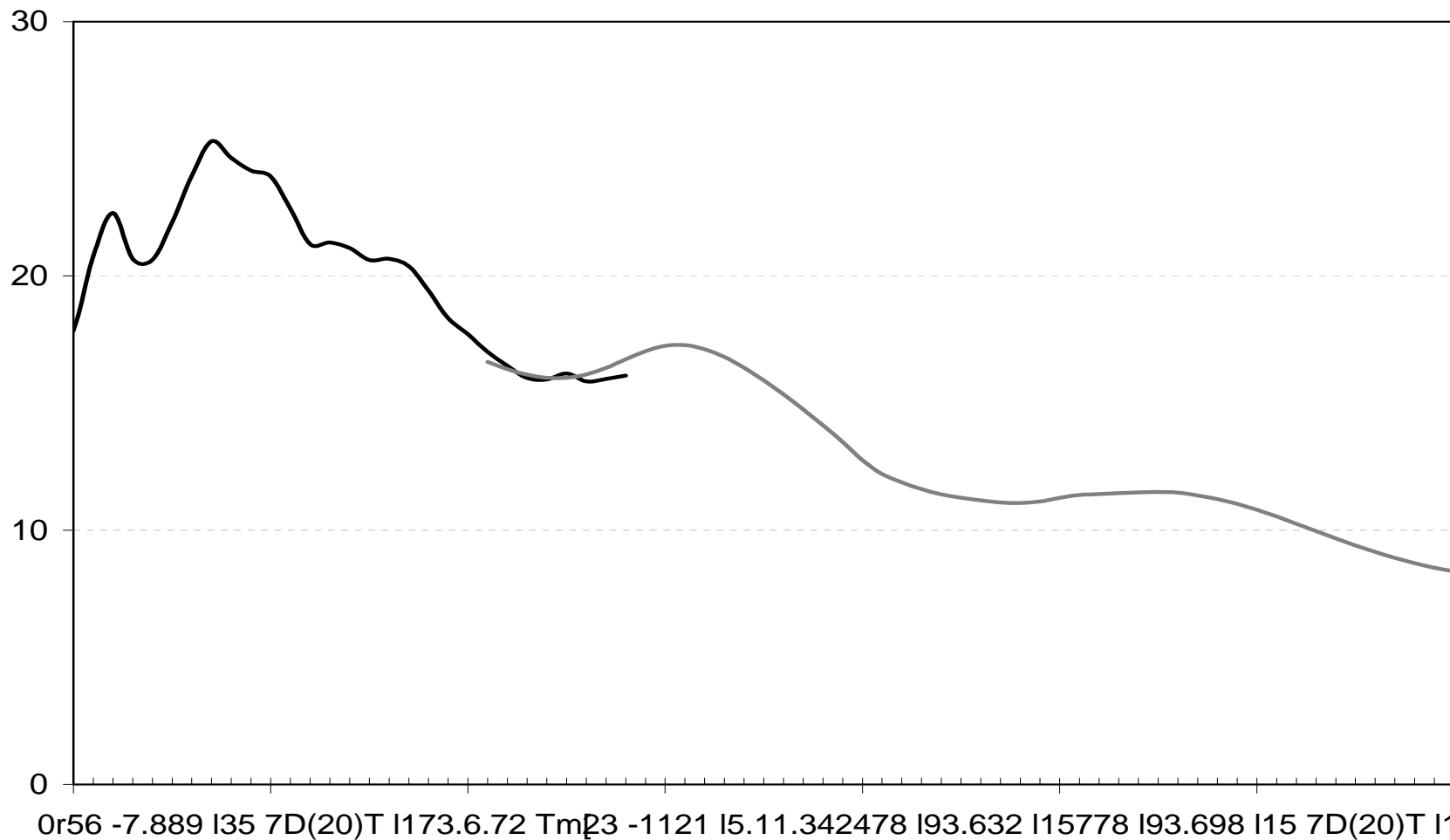
# Implication of Low Fertility

## Fragile families:

- **Single children: 160 million**
- **Over 1/3 households with one child**
- **50 % women 60+ with one child**
- **Tragedies seen in 2008 earthquake**
- **Fragility of the family system**



# Reported and Projected Number of Births, China 1980-2050



# Implication of Low Fertility

## Population Decline:

- Continue to decline for 50+ years
- Reduce by 220 to 300 million
- Median age to 50 by mid-century
- Reduce size by half at end-century

# Implication of Low Fertility

## Labor shortage:

- Economic boom due to large labor force
- Demographic dividend: 15-25% growth
- Sharp decline in labor supply
  - From 966 million in late 2020s to 761 million in mid-century
  - Reduce 100 million per decade, 10 million per year

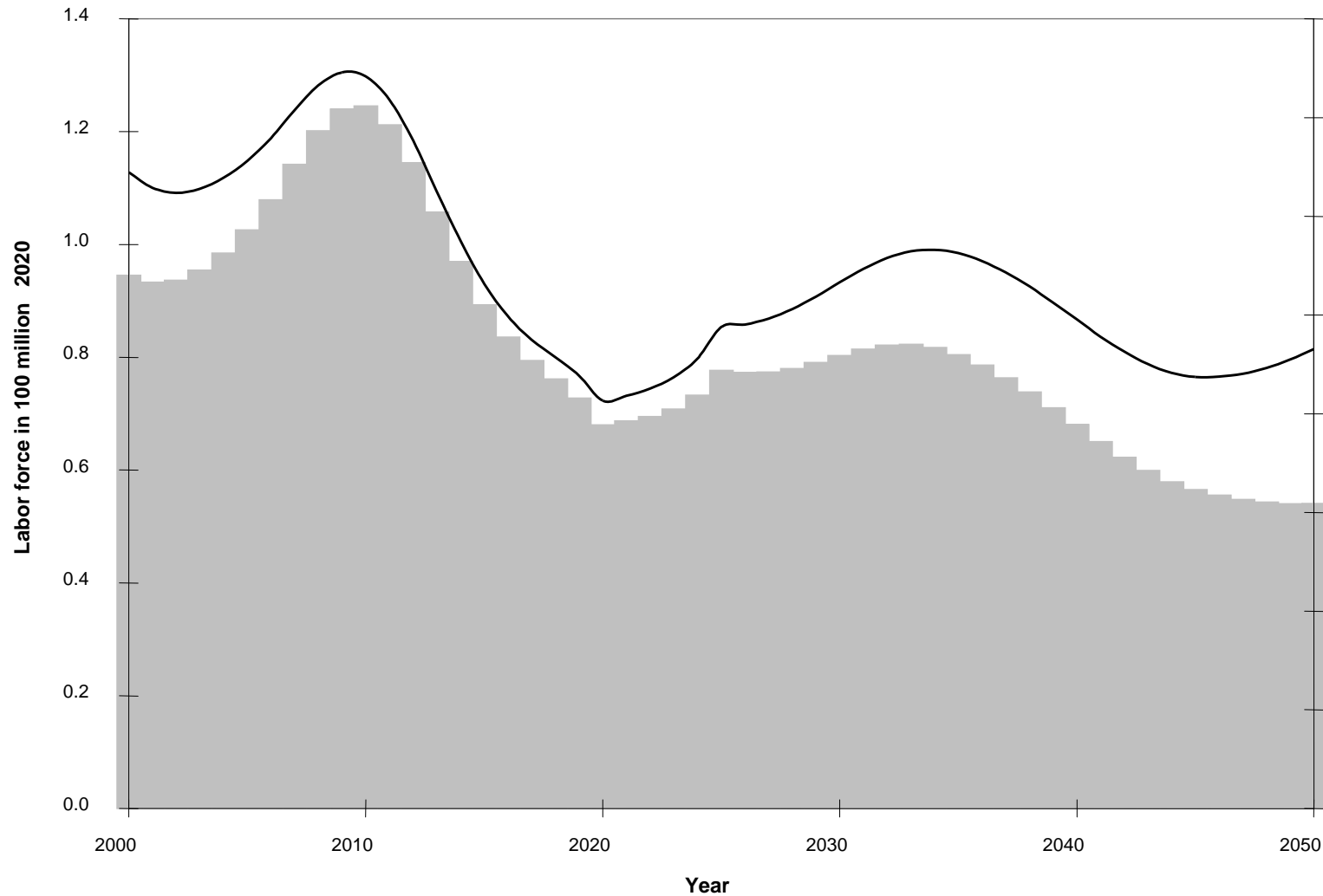
# Implication of Low Fertility

## Labor shortage:

- From “abundant supply” to “limited surplus”
- Young labor aged 20 to 24
  - Recently educated, more innovative, and active consumers
  - Reduce from 125 million in 2010 to only 68 million in 2020



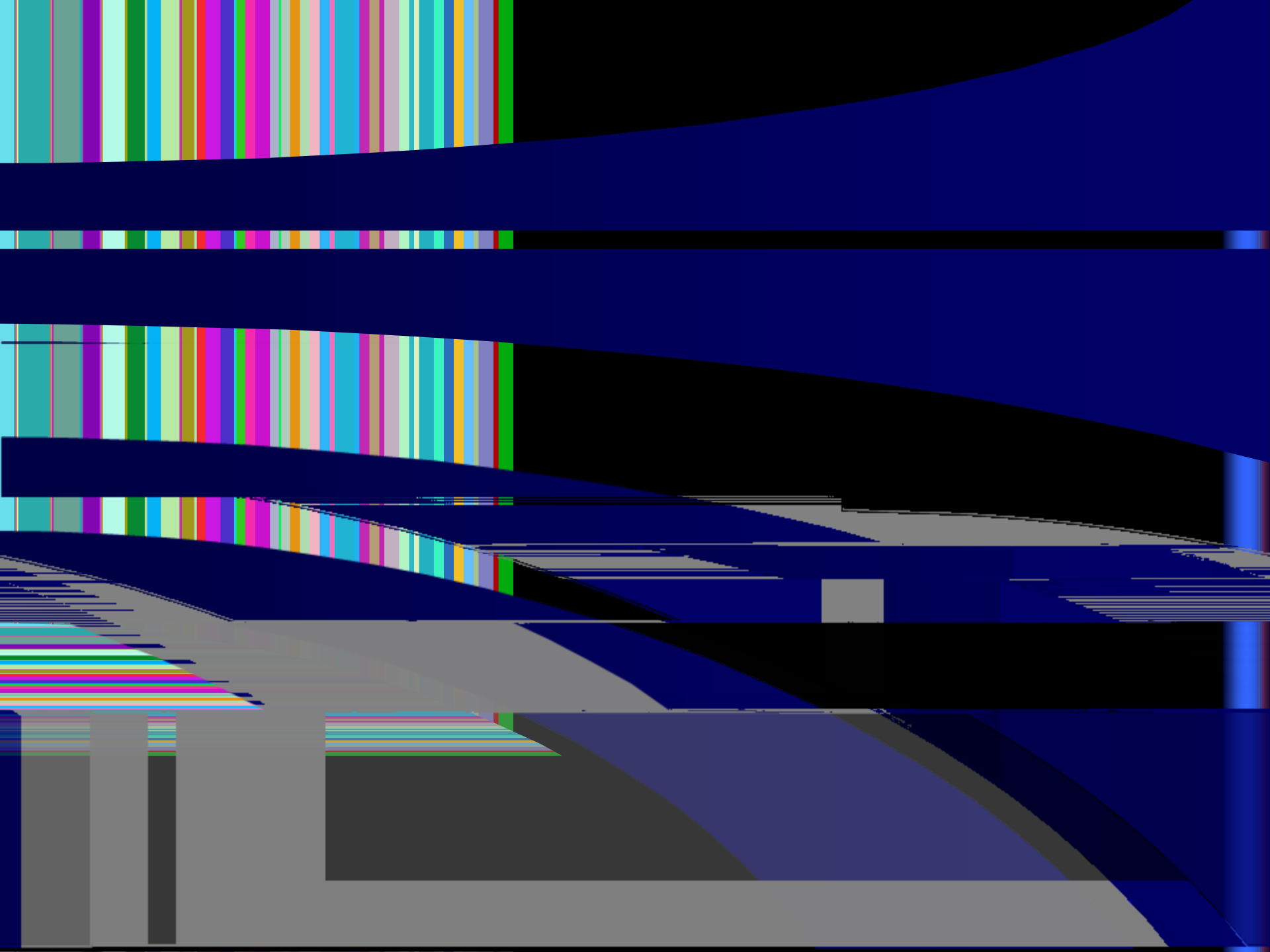
# Projected Trends in Young Labor Force, China 2000-2050



# Concluding Remarks

## To assess fertility in China:

- Effect of government policy
- Possible underreporting of births
- Empirical studies by various scholars
- Using various methods and data sets
- Reach similar conclusion of around 1.5



# Concluding Remarks

## Implication of low fertility:

- Too new to be fully addressed
- Certainly tremendous or revolutionary
- Future will tell what discussed is only the tip of the iceberg
- “Below replacement”: a new global demographic norm

The background features a complex, abstract design. It consists of several curved, overlapping bands in shades of blue and grey, creating a sense of depth and movement. A prominent vertical bar on the left side is composed of numerous thin, parallel lines in a wide spectrum of colors, including red, orange, yellow, green, cyan, blue, purple, and magenta. The overall aesthetic is modern and digital.

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