

The demographic transition revisited: A cohort perspective

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Objectives

- **Depict the demographic transition**
 - Focus on **fertility transition** by means of **cohort measures**
 - Cohort total fertility rates
 - Cohort parity distribution
 - Cohort fertility age patterns
 - Brief delineation of **mortality transition: cohort and period measures**
 - No attention to **population growth** and **international migration**
- **Discuss key societal factors shaping the demographic transition**

Concept of *demographic transition* developed in first half of 20th century

Adolphe Landry

1909 “Les trois theories de la population”

1934 *La révolution démographique*

Warren Thompson

1929 “Population”

Alexander Carr-Saunders

1936 *World Population: Past Growth and Present Trends*

Frank Notestein

1945 "Population-The Long View"

“by convention regarded as its first definition”

1953 “Economic Problems of Population Change.”

examined the causes of the demographic transition and spelled out the implications for research and policy development and actions.

Notestein (1953: 17)

Impossible to be precise about various causal factors-many were important

- **The new ideal of small family arose in urban industrial society**
- **In a period of rapidly developing technology new skills were needed**
- **Education and a rational point of view became increasingly important**
- **The cost of child-rearing grew**
- **Women found new independence from household obligations and new economic roles less compatible with child-rearing**

In sum,

- **Mortality and fertility trends are shaped by “**technological, social, economic, and political developments**”**
- **Subsequent research revealed that **cultural** (Coale Euro fertility project) and **ideational** effects (van de Kaa & Lesthaeghe) may be of comparable importance**

Advantages of cohort perspective

- **CTFR reflects the real life experiences** of women born in a particular year **better than PTFR-more accurate than period TFR**
- **CTFR trend reflects changes only in the quantum of fertility** real childbearing trends-
not affected by the timing of births-advance accelerates rate of change- postponement decelerates rate of change
- **CTFR trend-smooth; PTFR-uneven**

Limitations

- **Delayed info of measure**—available at end of reproductive period
- **Delayed info of trend**-does not matter for long-term/historical analysis

The 3 advantages stand out

Mortality transition [Best-practice life expectancy]

Cohort length of life

<i>1870</i>	<i>1950</i>	<i>Increase</i>
54	84	30

Period length of life

<i>1870</i>	<i>1950</i>	<i>2008</i>	<i>2050 projection</i>
53	73	86	95

Increase in period length of life

<i>Period</i>	<i>Years</i>	<i>Annual increase in years</i>
<i>1870-1950</i>	20	0.25
<i>1950-2008</i>	13	0.22
<i>2008-2050</i>	9	0.21

Source: Shkolnikov 2011

Four types of fertility transition patterns

“Western” fertility transition - major fluctuations

1870 CTFR = 5 births per woman

1905 CTFR = ± 2 births per woman

1930 CTFR = 2.1-3.6 births per woman

1950-1970 CTFRs = 1.7-2.0 birth births per woman

Central and East European fertility transition

1870 CTFR = 5 births per woman

1920s-1950s CTFR = stable 1.7-2.2

1960s CTFRs = 1.6-1.8

Southern European fertility transition – “stable” decline

1870 CTFR = 5 births per woman

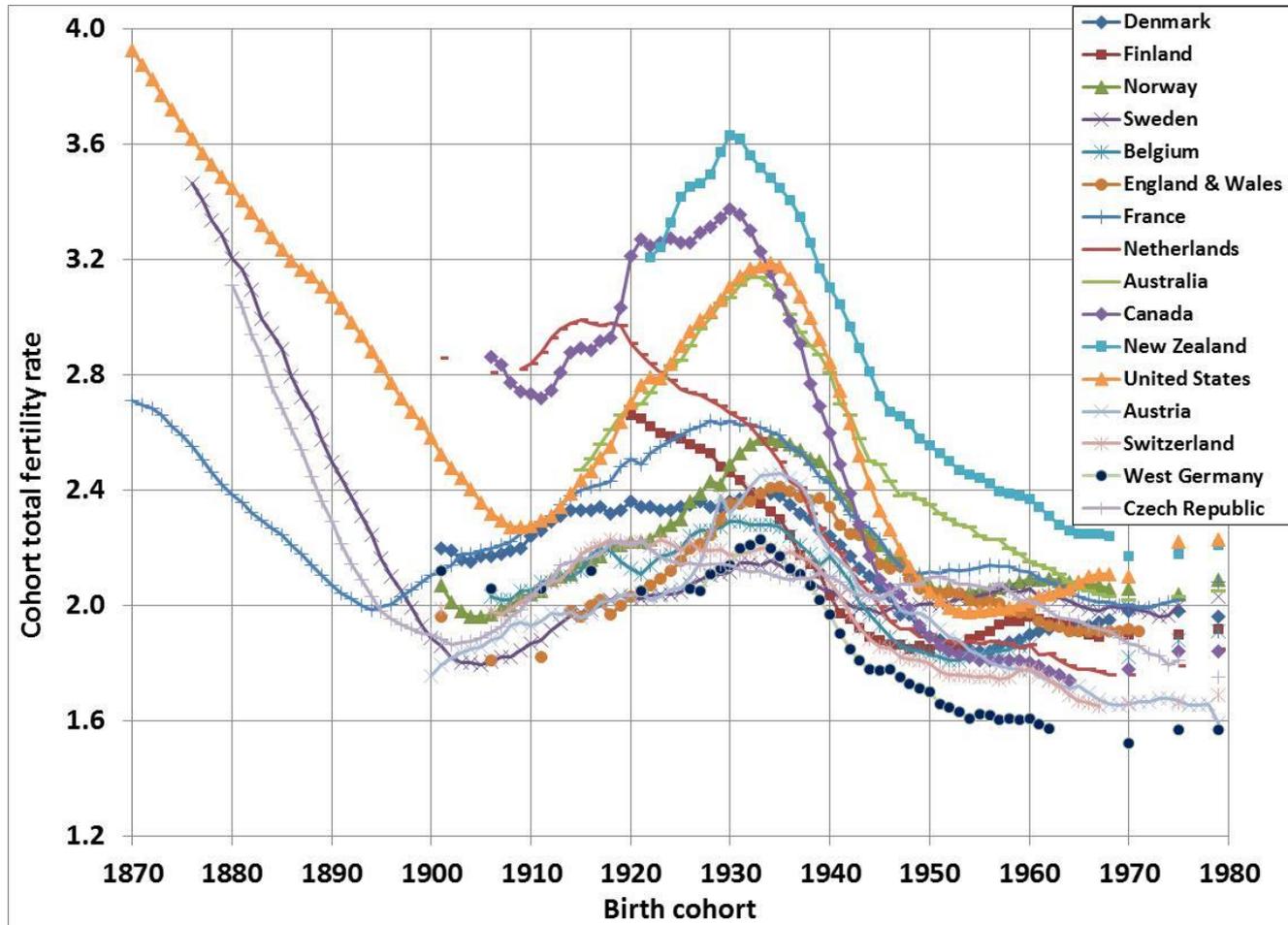
1960s CTFRs = 1.4-1.7

East and South-East Asia fertility transition – rapid decline

1920s CTFRs = 5 births per woman

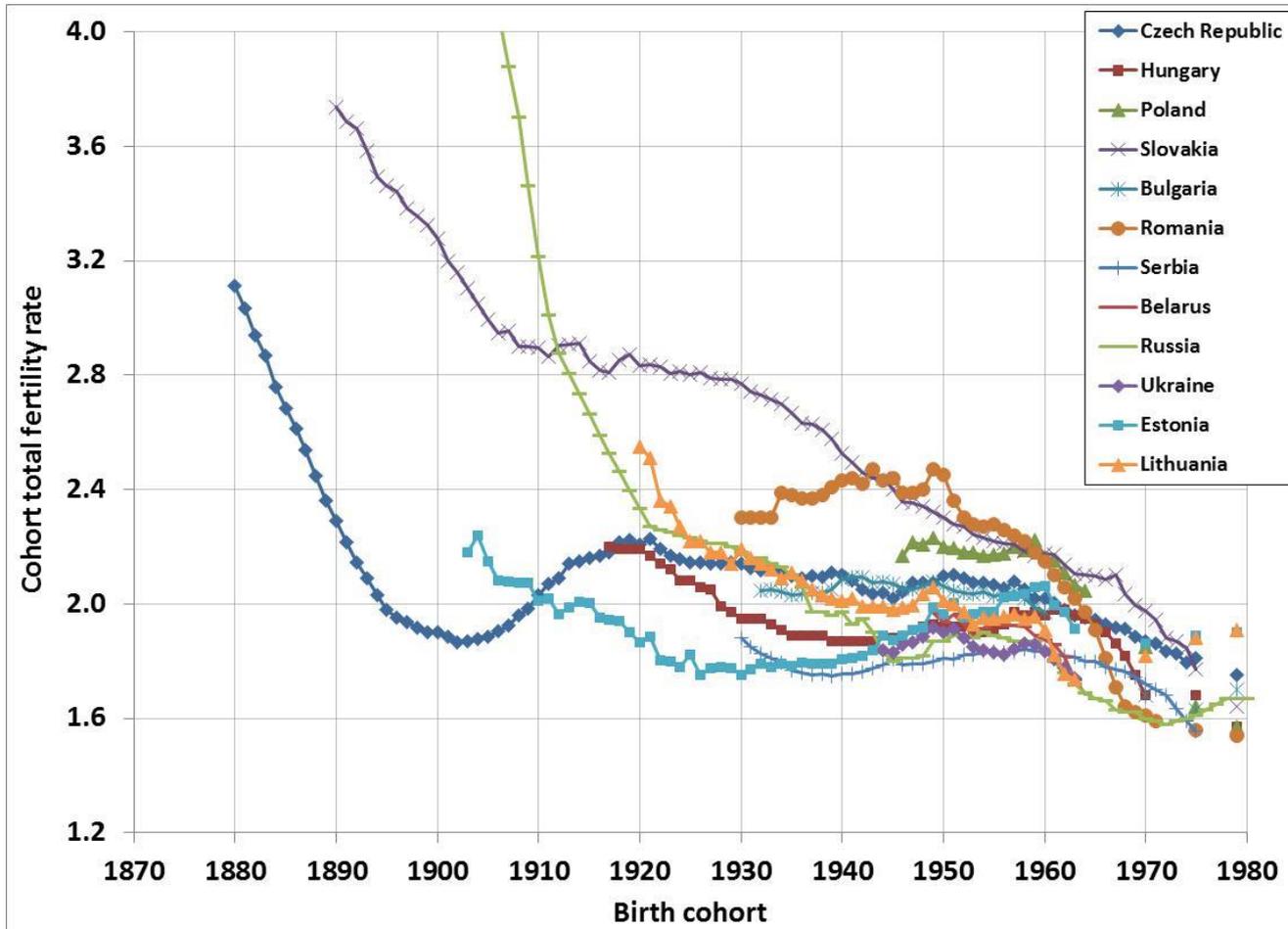
1960s CTFRs = 1.2-1.6

“Western” fertility transition - major fluctuations

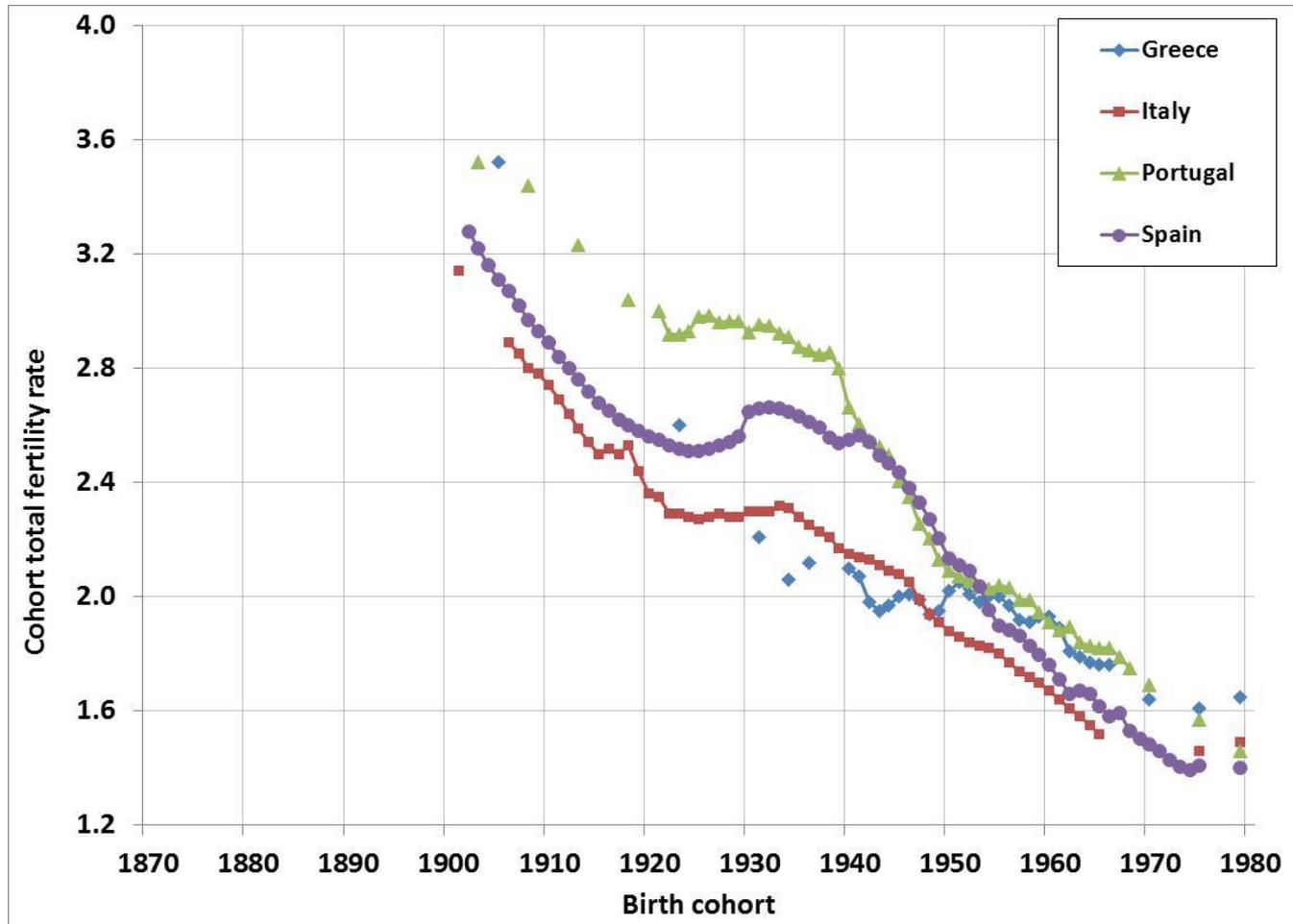


Central and East European fertility transition

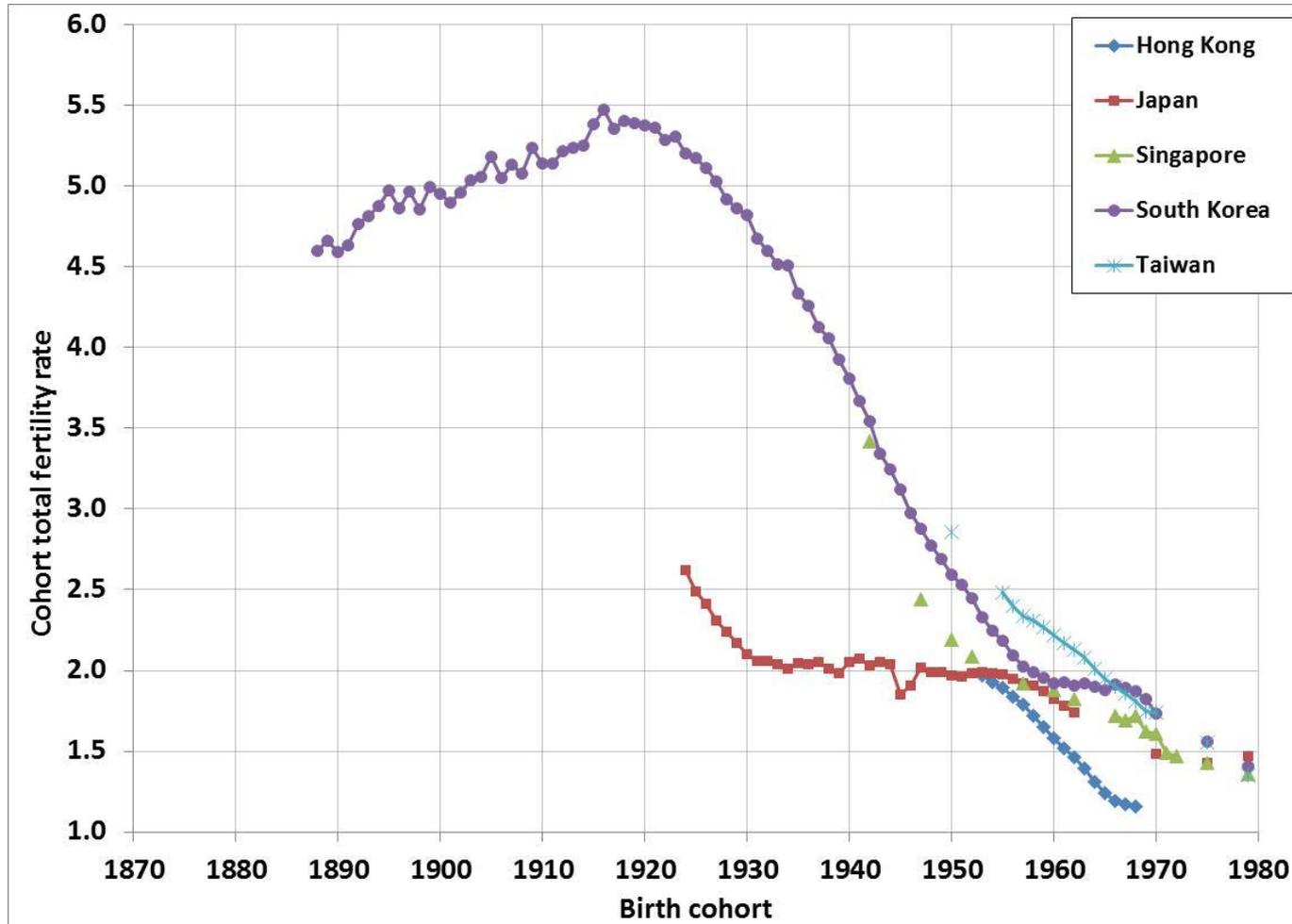
1920s-1950s CTR = stable 1.7-2.2



Southern European fertility transition – “stable” decline



East and South-East Asia fertility transition – rapid decline



Societal conditions shaping mortality and fertility

- **Complex combination of “technological, social, economic, and political developments” as well as cultural and ideational effects**
- **“impossible to be precise about the various causal factors”**

Key factors

- **Economic:** 1930s Great Depression or 1960s prosperity in Western countries
- **Political system and social policies**, namely in the era of state socialism in Central and Eastern Europe
- **Patriarchal nature of societies** in Southern Europe and in East and South-East Asia, combined with other factors

Second Demographic Transition (SDT)

- Many demographic characteristics pertaining to unions, fertility and societal background were significantly **different in the last third of the 20th and in the early 21st century** compared to the 19th century and the first two-thirds of the 20th century
- These realities have been eloquently described, discussed, developed and advanced as the **Second Demographic Transition (SDT)** (Lesthaeghe & van de Kaa 1986; Lesthaeghe 2010).
- **Causes of the demographic transition (DT) as outlined by Notestein (1945 and 1953), i.e. “technological, social, economic, and political developments,”** have been **operating continuously throughout the past two centuries** to this day.

In such a perception of basic demographic developments of the past two centuries the **SDT and the DT as described and developed by Notestein are not two contrasting systems, but the SDT is a natural component of Notestein's understanding of the demographic transition**

Principal findings based on data from 36 populations

❖ The analysis of cohort total fertility rates (CTFRs) to date specifies **four types of fertility transition patterns** during the late 19th and the 20th centuries

- *“Western” fertility transition pattern*
- *Central and East European fertility transition pattern*
- *Southern European fertility transition pattern*
- *East and South-East Asia fertility transition*

❖ In all four fertility transition patterns CTFRs were below replacement in the 1960s and early 1970s birth cohorts

Exceptions: New Zealand and the United States. In some populations CTFRs were close to replacement:, i.e. England & Wales, France, Australia, the Czech Republic, Denmark, Norway and Sweden.

Highest CTFRs were found in “Western” populations, lowest in East and South-East Asia

Principal findings based on data from 36 populations [continued]

- ❖ Societal conditions shaping mortality and fertility trends of the 19th and 20th centuries confirm Notestein's conclusions that it is a complex combination of “technological, social, economic, and political developments” as well as cultural and ideational and it is “impossible to be precise about the various causal factors.”

Alternating key factors: economic, political system and social policies, patriarchal nature of societies

- ❖ Demographic transition has **not led to an equilibrium** of relatively stable low mortality and stable low fertility. Mortality is continuing to decline steadily and fertility trends are in a flux with unclear prospects.
- ❖ Cohort fertility data analysis similar to those based primarily on period fertility data Lutz et al. (2014) on *World Population and Human Capital in the Twenty-First Century*

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