

Claudia Goldin
Harvard University

GROWTH

Schooling

GROWTH

Technology
Creation

Technology
Diffusion

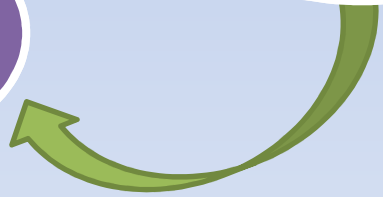
Schooling

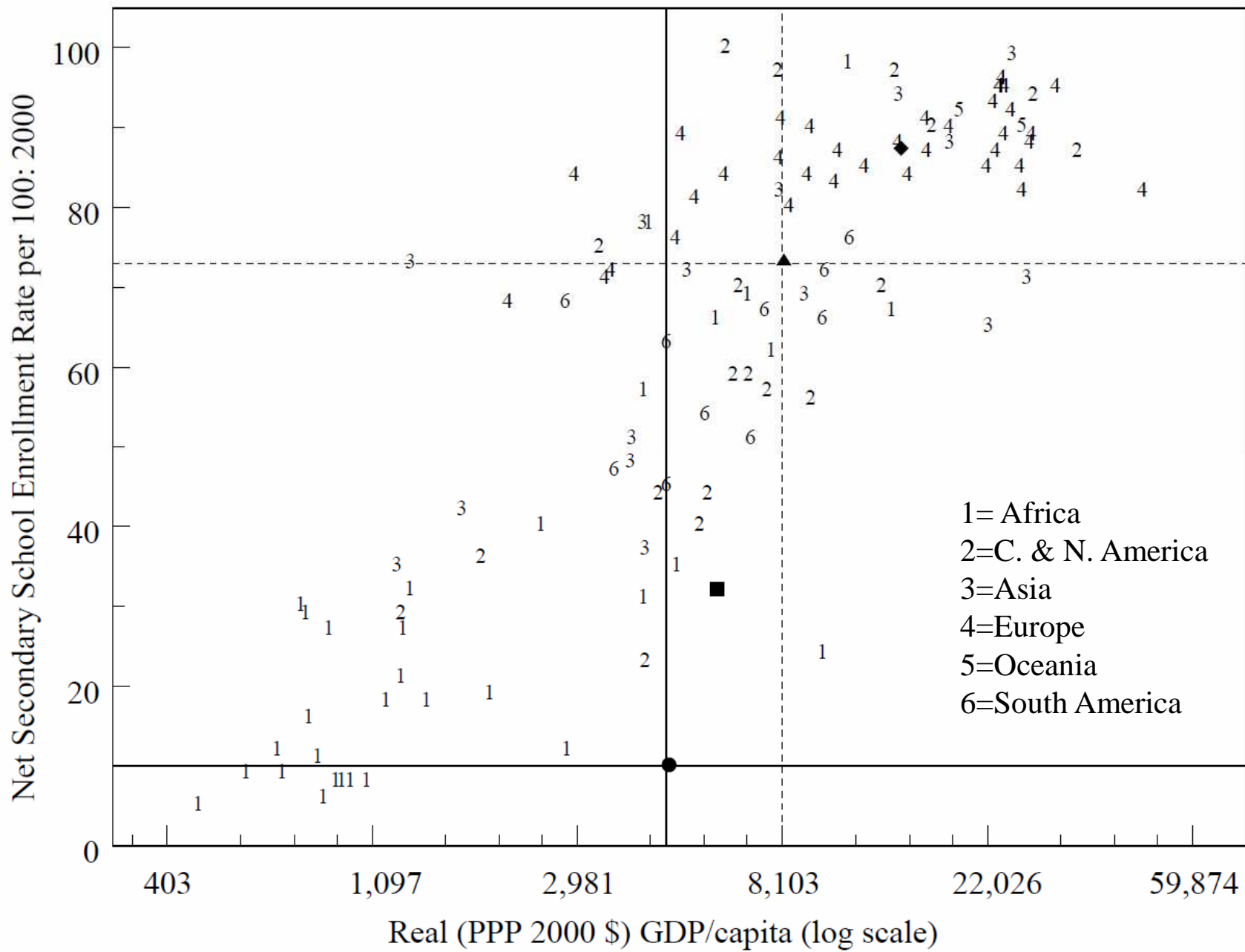
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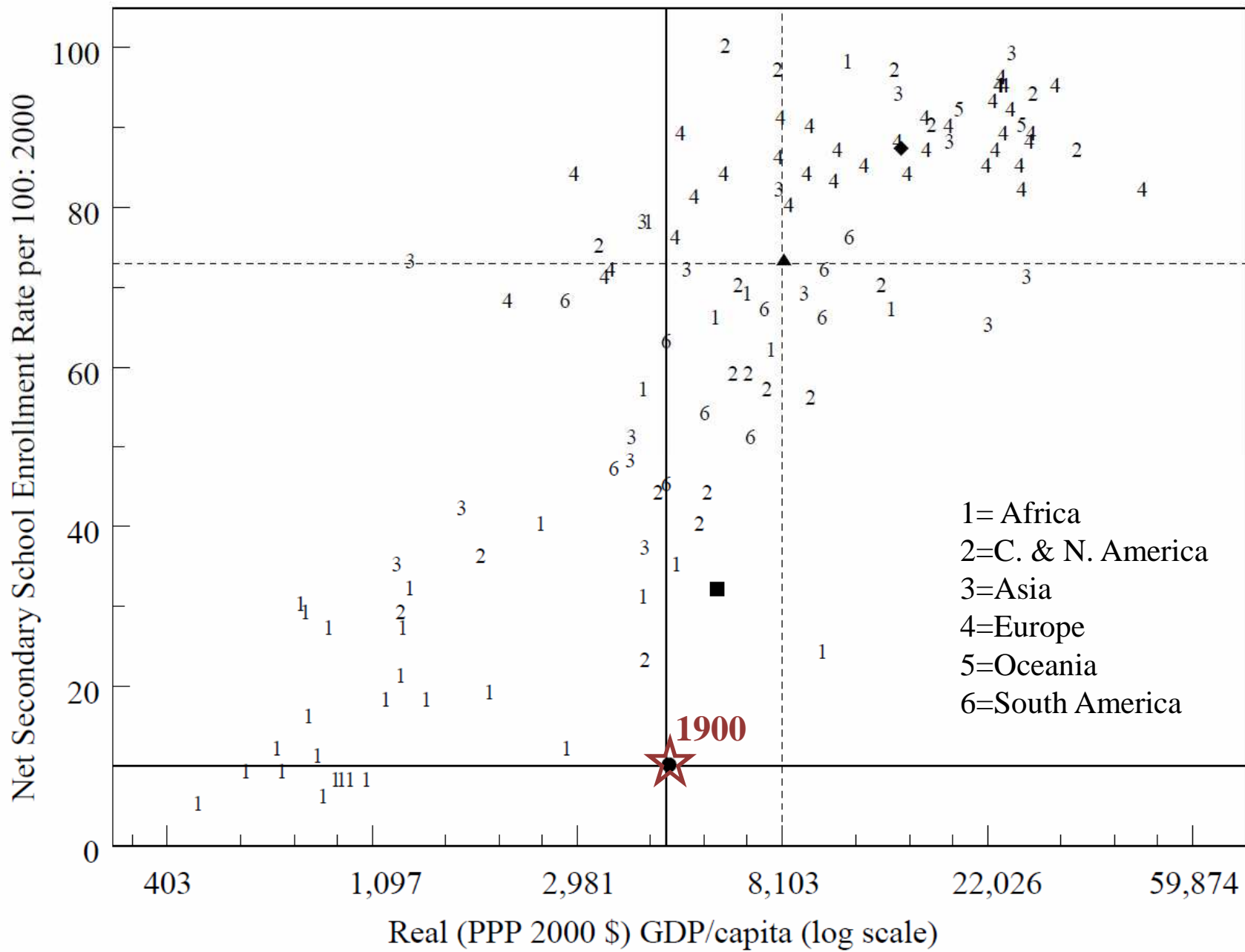
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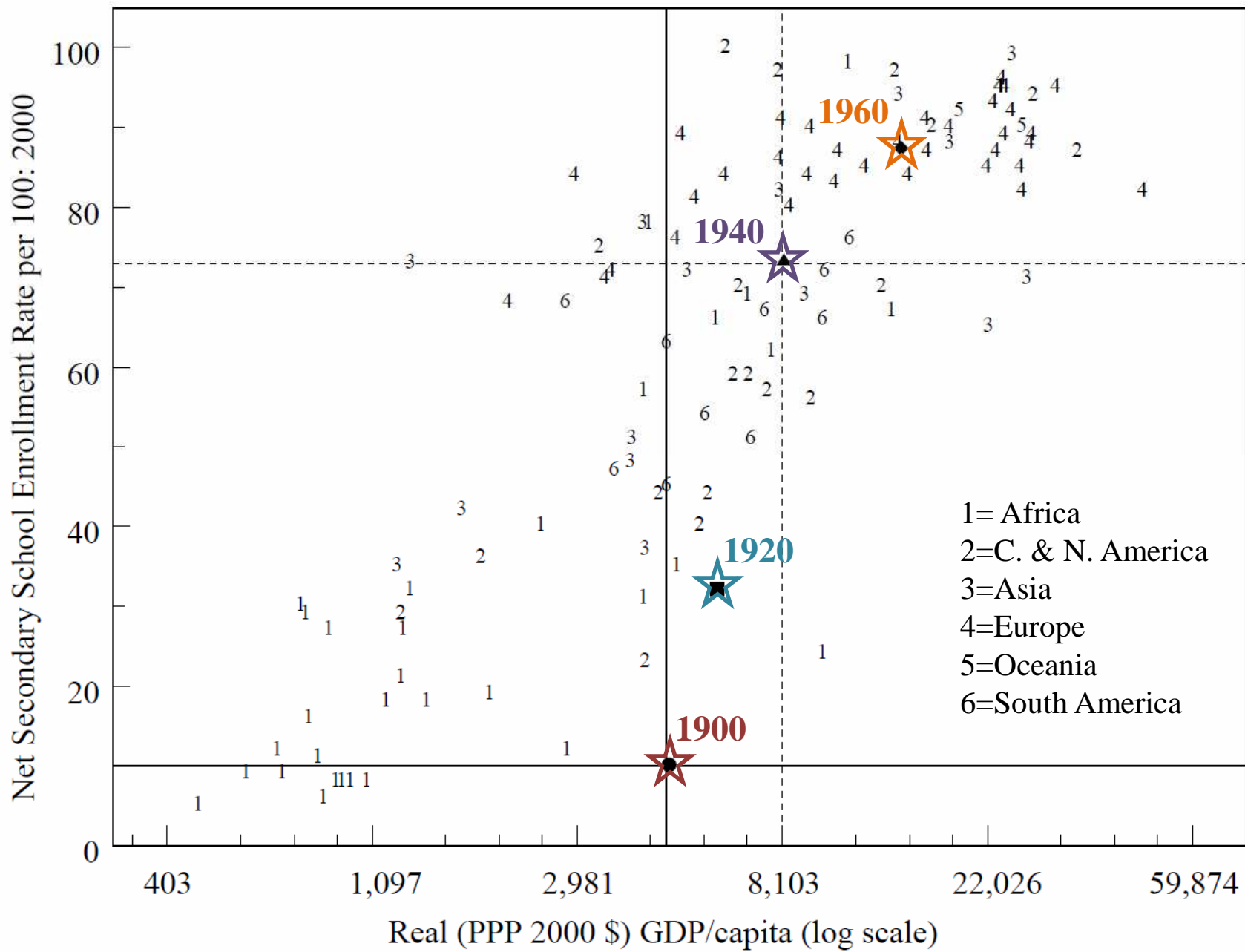




Goldin & Katz (2008)



Goldin & Katz (2008)



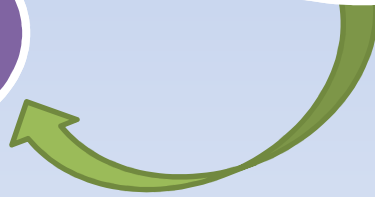
Goldin & Katz (2008)

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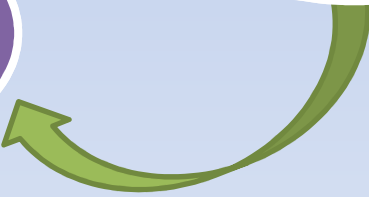
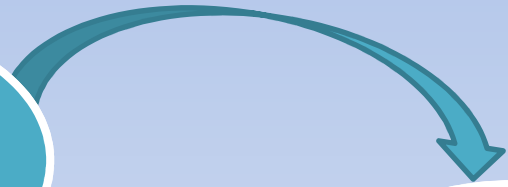


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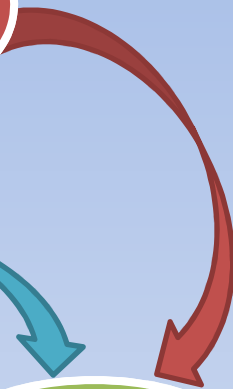
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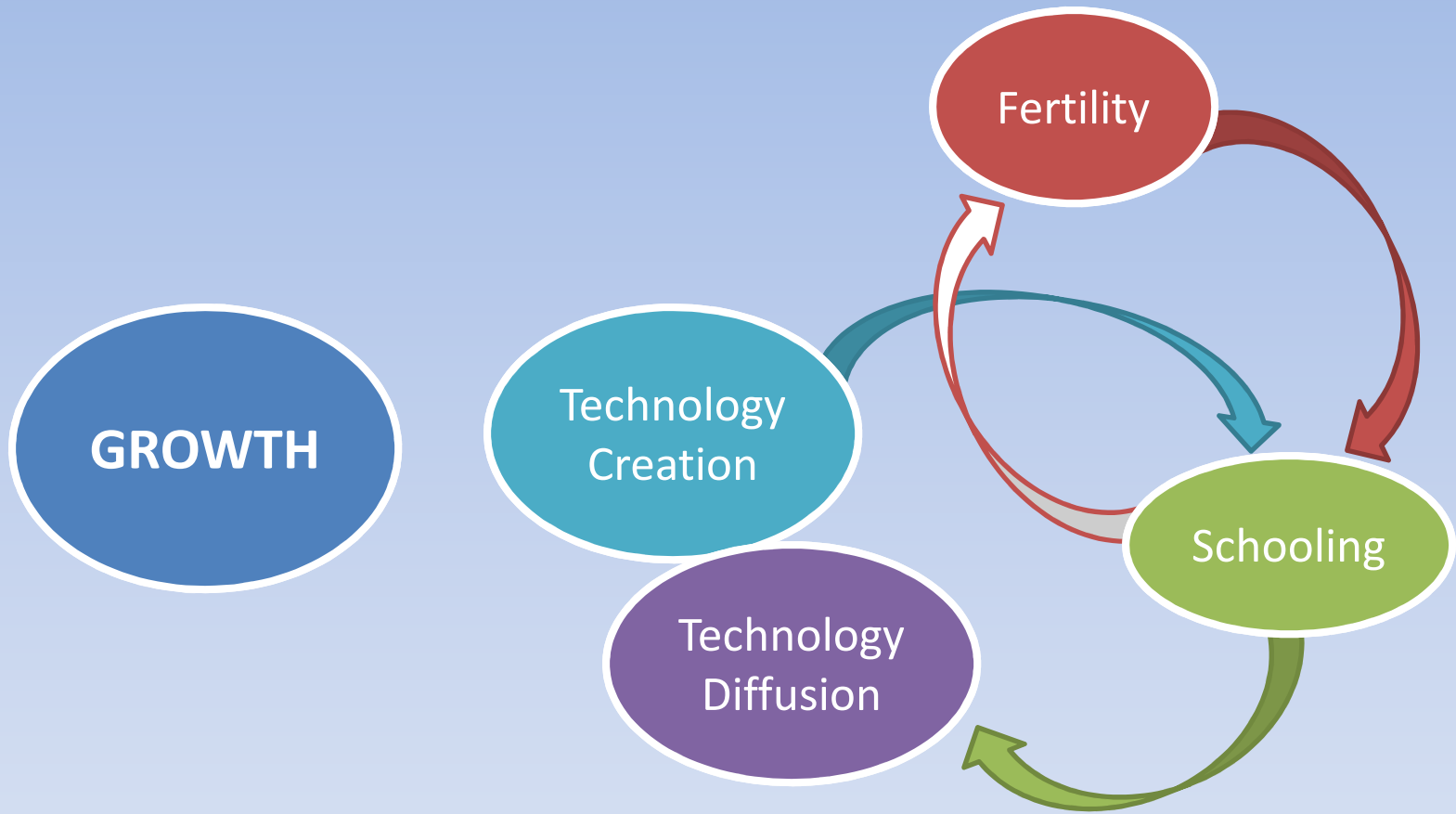
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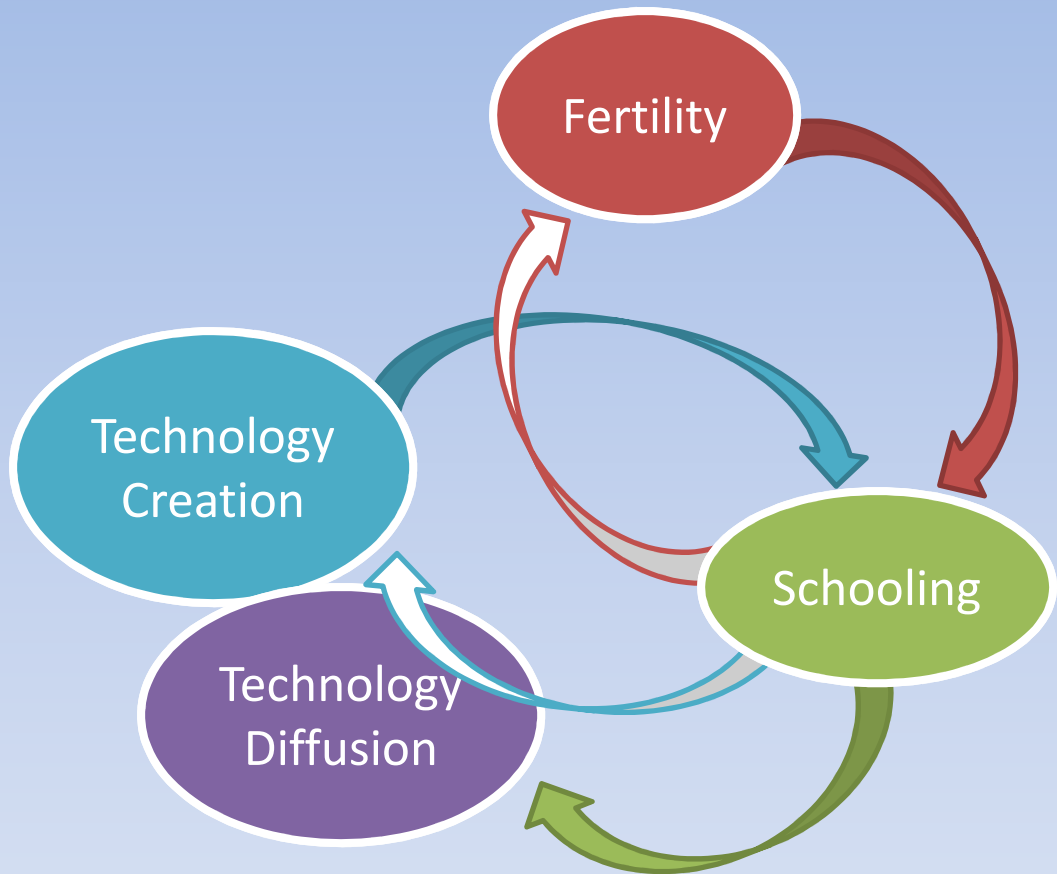
Fertility

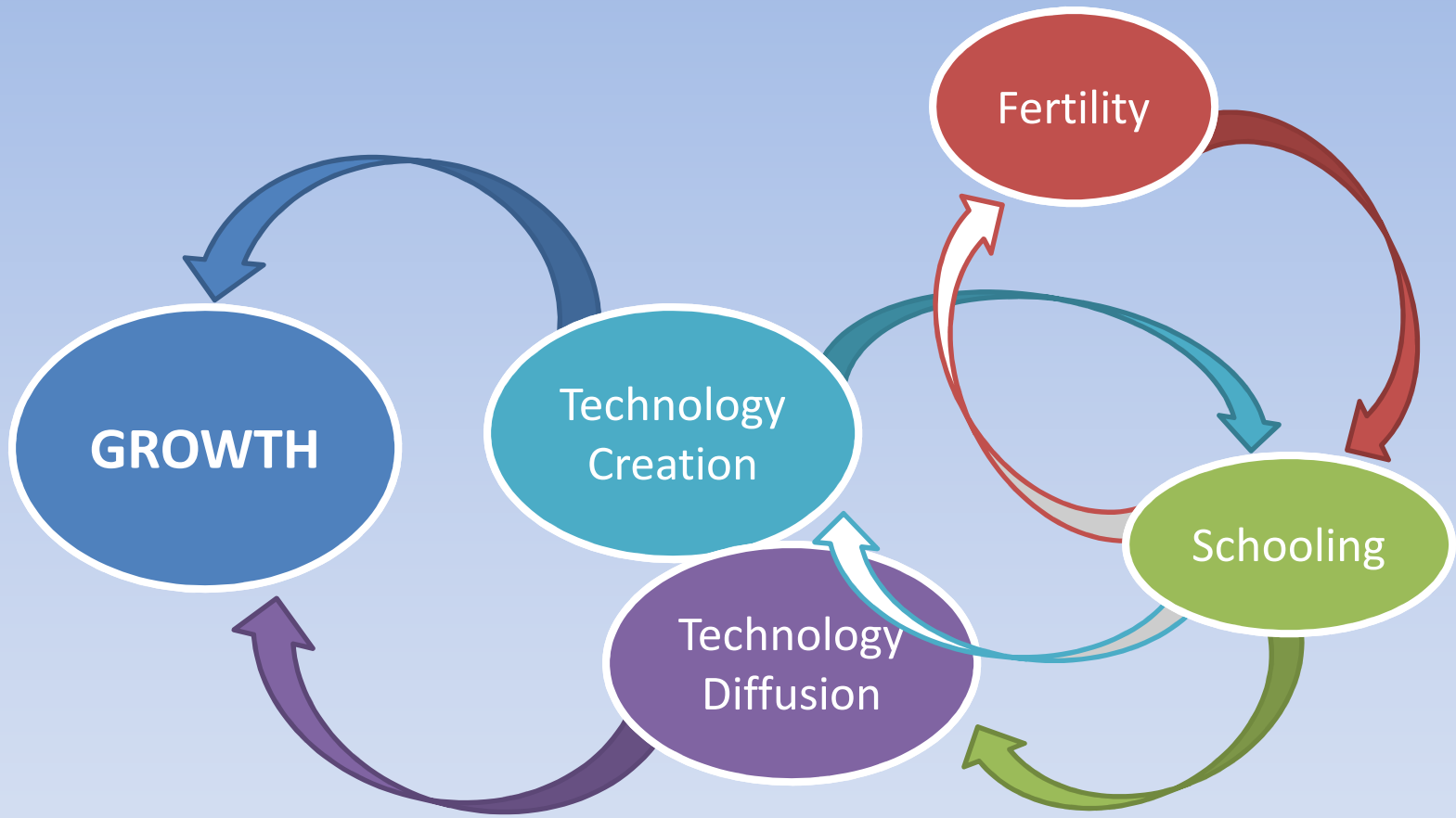
Schooling

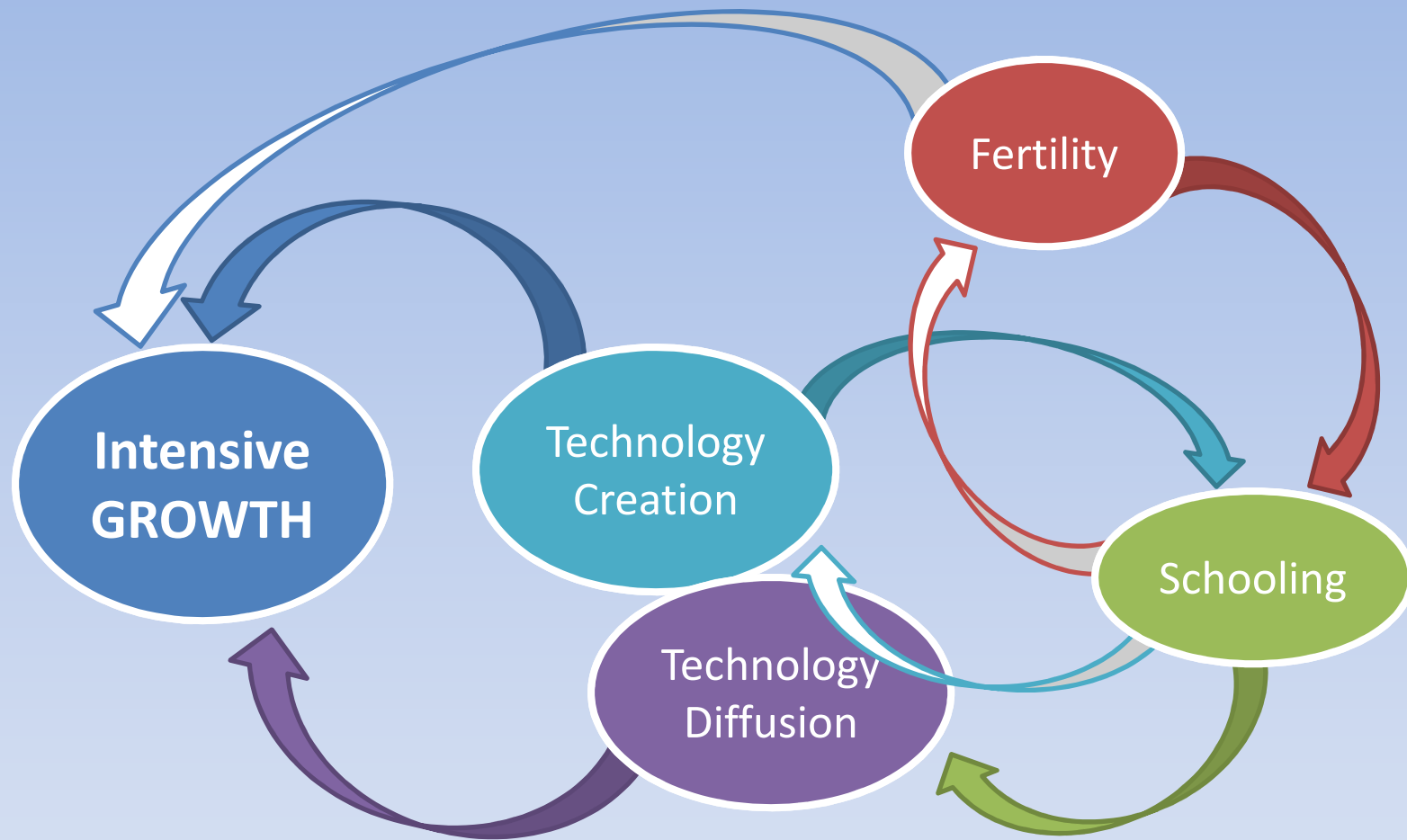




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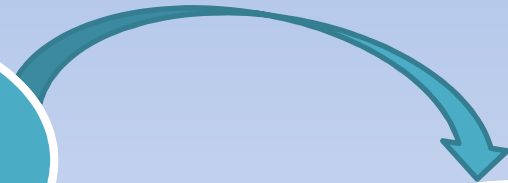


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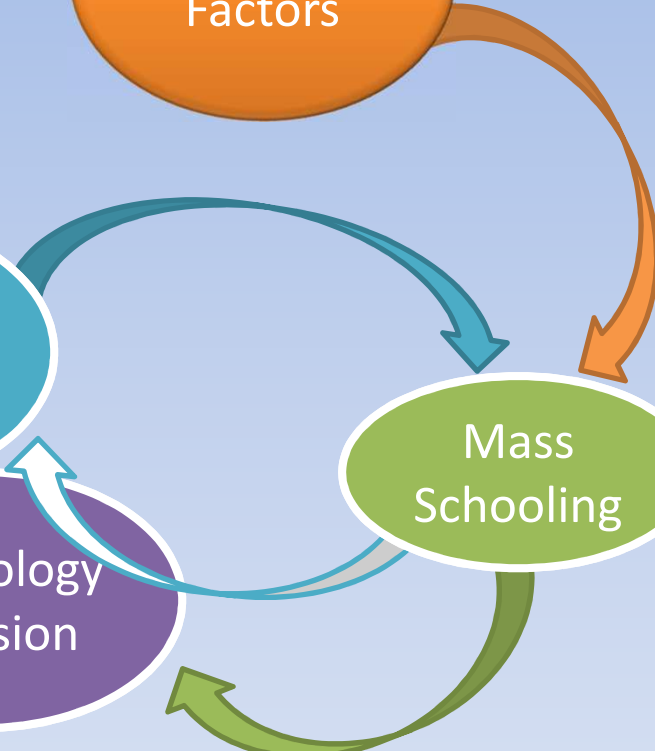
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Enabling
Factors

Mass
Schooling



Where is the “State”? Education as a Quasi-Public Good

- Private versus public provision; private versus public funding

Provision

Funding

Public

Private

Public

Public schools
(common; graded)

Vouchers (US; Sweden);
Pauper schools (19th C.)

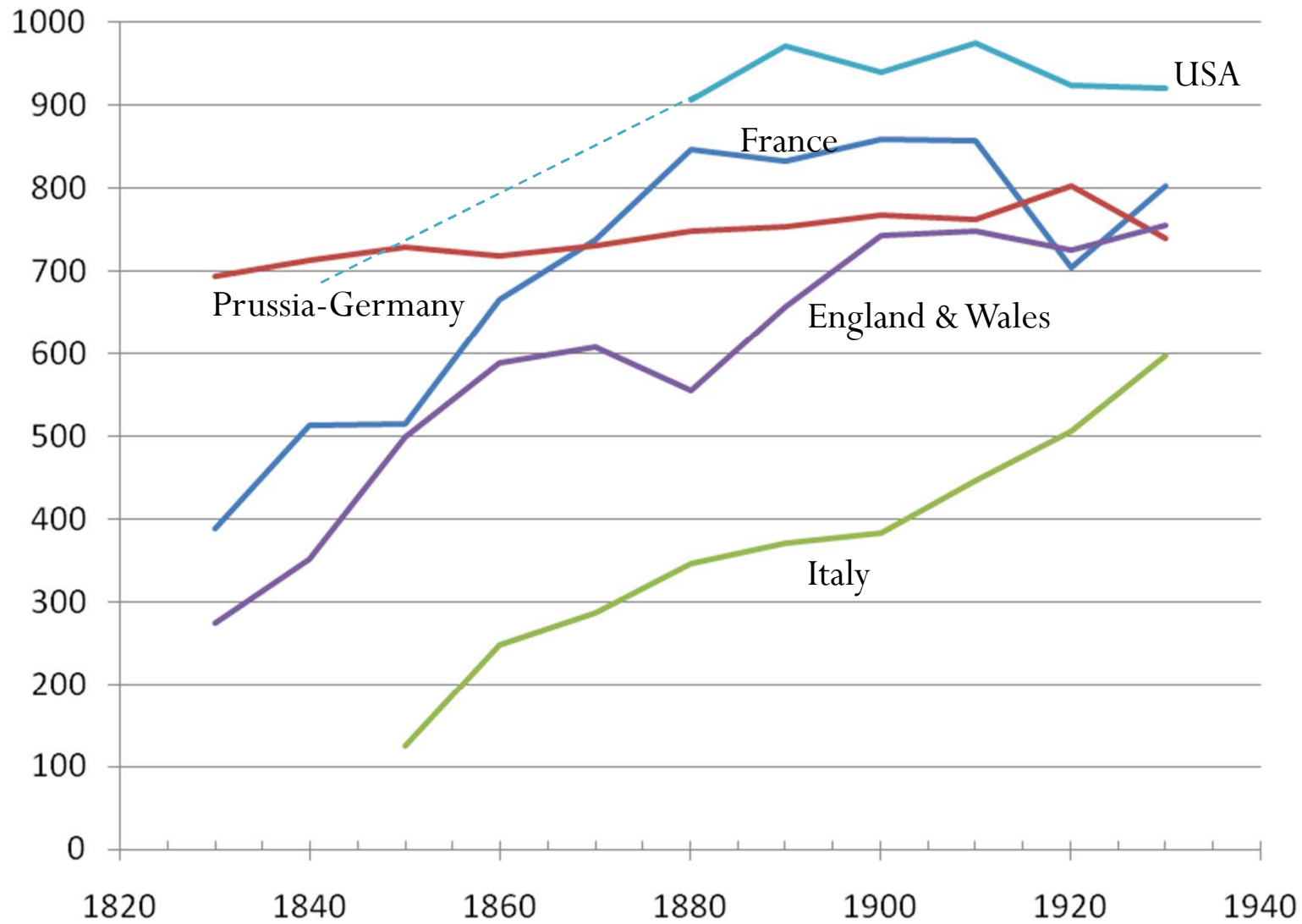
Private

Rate-bills (19th C.);
Tuition bills (20th C.)

Private schools;
Academies (19th C.)

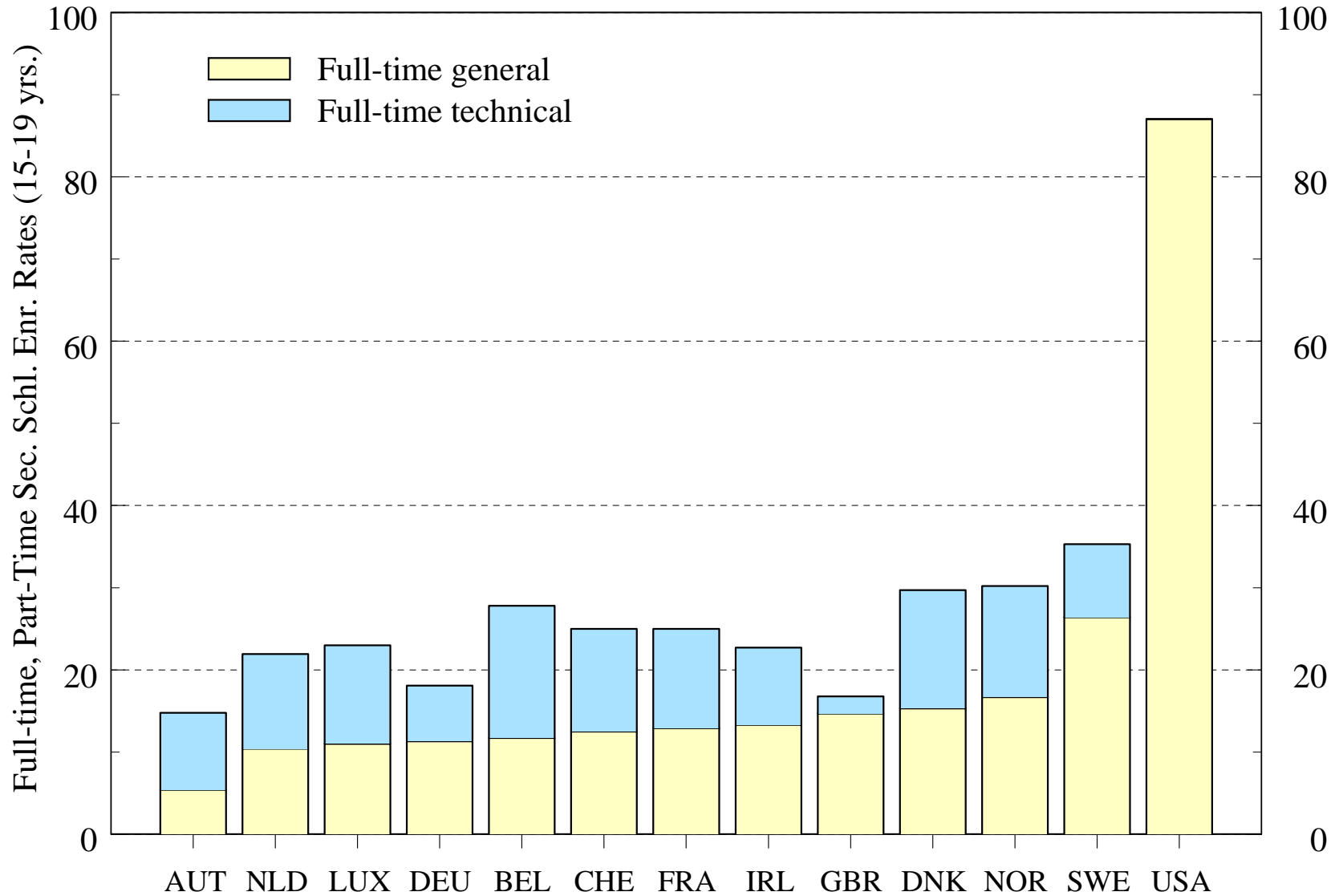


Public & Private Primary School Students/5 to 14 Yr Olds (000)



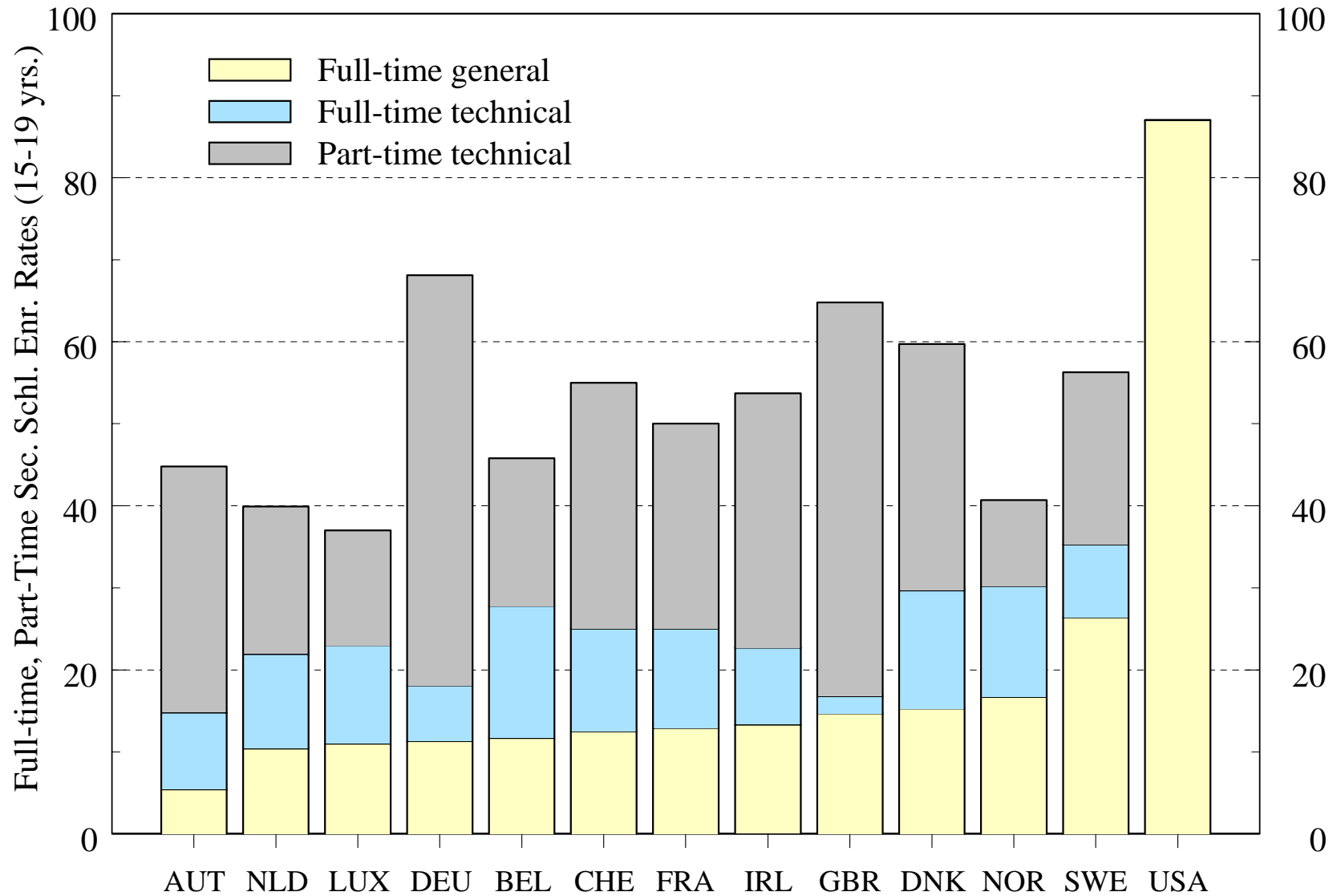
— France — Prussia — Italy — EngWales — USA *Source: Lindert*

Secondary School Enrollment Rates: OECD, 1955/56



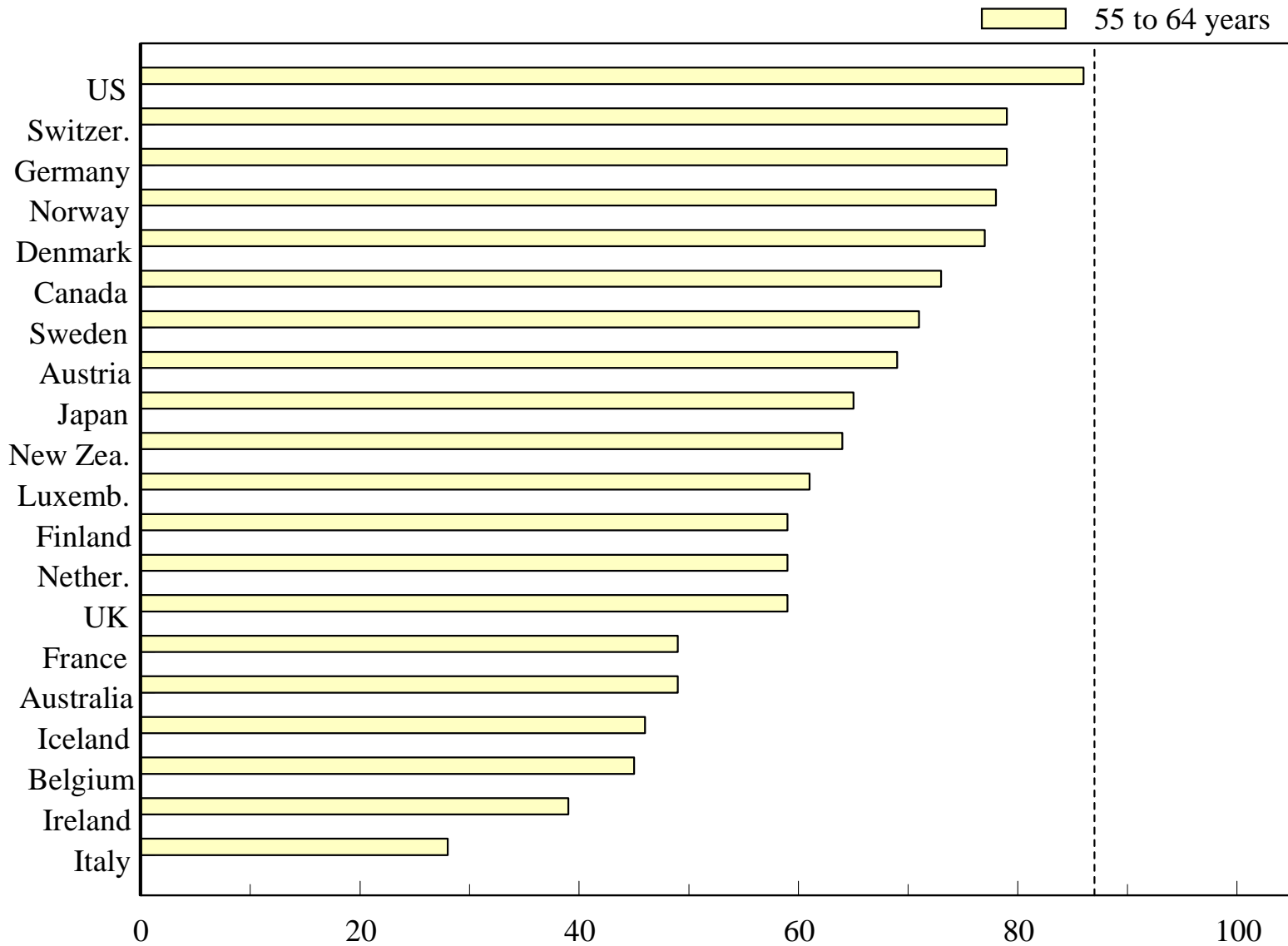
Source: Goldin & Katz (2008), fig. 1.7

Secondary School Enrollment Rates: OECD, 1955/56

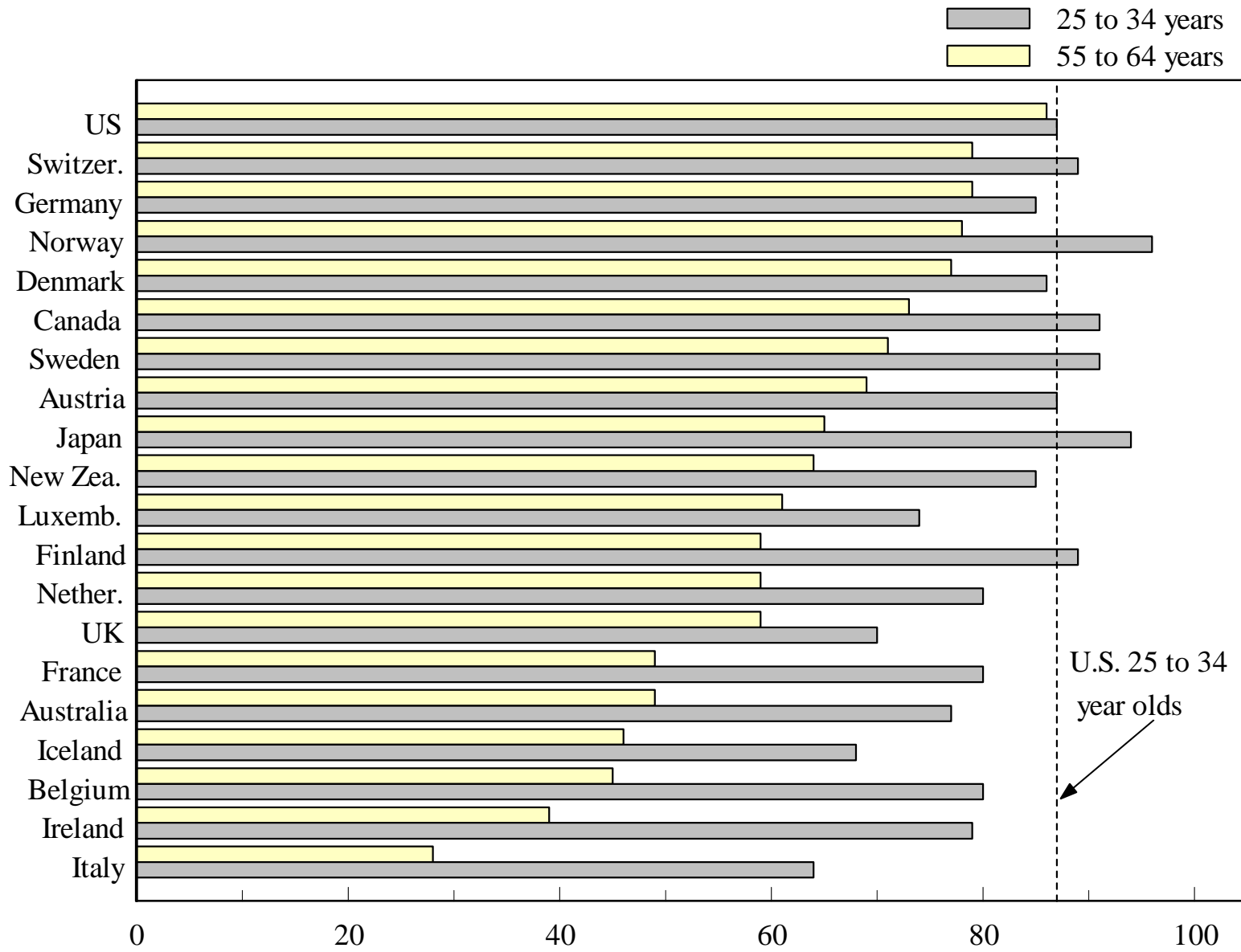


Source: Goldin & Katz (2008), fig. 1.7

Secondary School Completion Rates by Age: OECD, 2005



Secondary School Completion Rates by Age: OECD, 2005



Why Did Schooling Advance When It Did?

- Pecuniary returns to years of education: Mincer-type estimation using the Iowa State Census of 1915. Returns to a year of high school were quite high; even for agricultural occupations. Potential biases to estimates, theory and actuality.
- Skill-biased technical and sectoral change in the 19th and 20th centuries; “race between technology and education.”
 - Rise of white-collar employment; increased employment in large industries; retail trade
 - Increased importance of education even for blue-collar workers in manufacturing c.1920s

Returns to Years of Schooling, 1915: “Mincer” Equations

Males, 18 to 34 Years Old

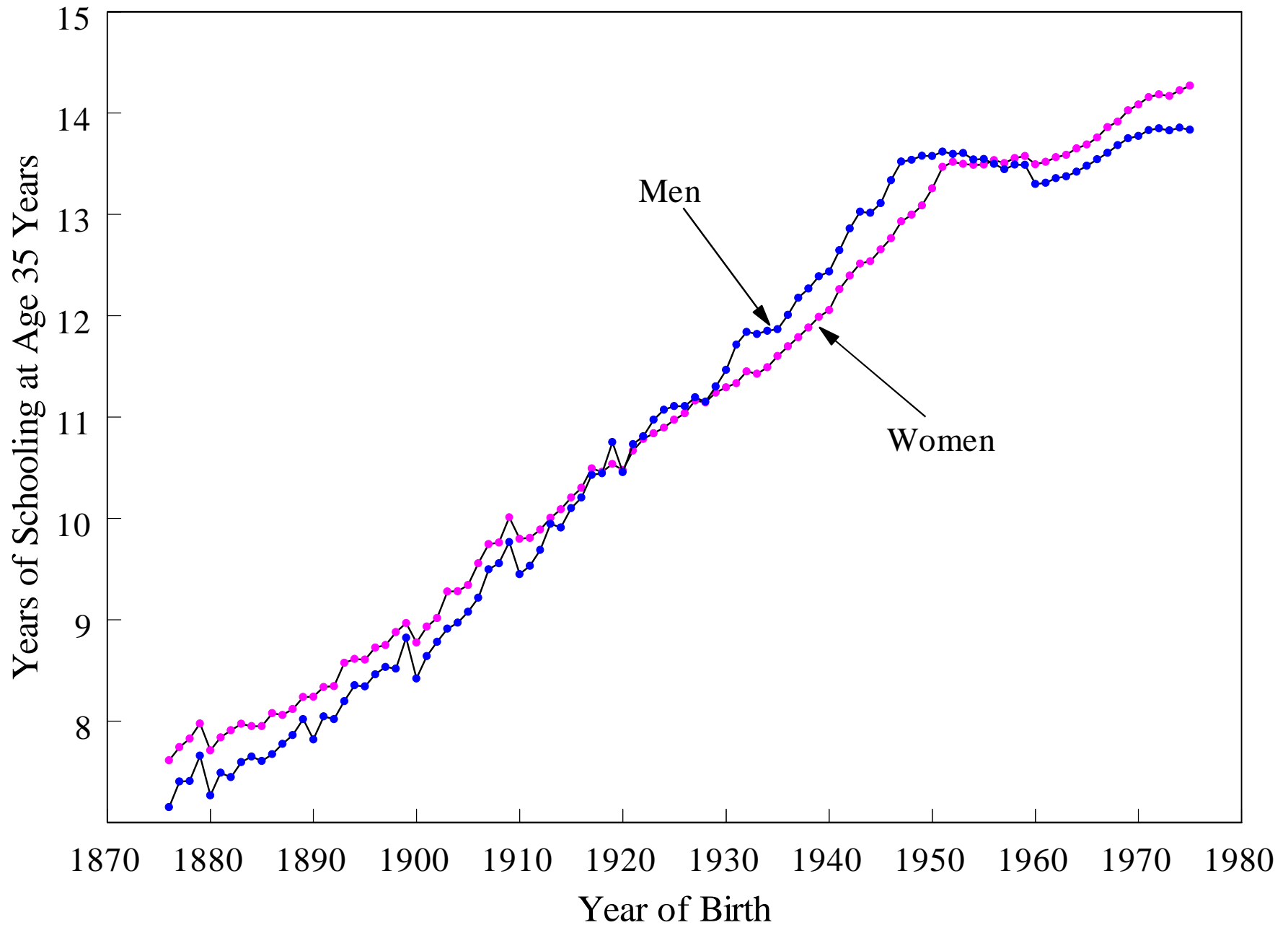
Years in school	All Occupations	Farm	Blue-Collar	White-Collar
Common school	0.0483 (0.00395)	0.0637 (0.00837)	0.0229 (0.00450)	0.0438 (0.00889)
Grammar school	0.0693 (0.00421)	0.0568 (0.0110)	0.0634 (0.00458)	0.0679 (0.00909)
High school	0.120 (0.00564)	0.132 (0.0176)	0.0908 (0.00738)	0.0826 (0.00747)
College	0.146 (0.00915)	0.166 (0.0381)	0.0575 (0.0195)	0.131 (0.00849)

Source: Goldin & Katz (2008), table 2.5

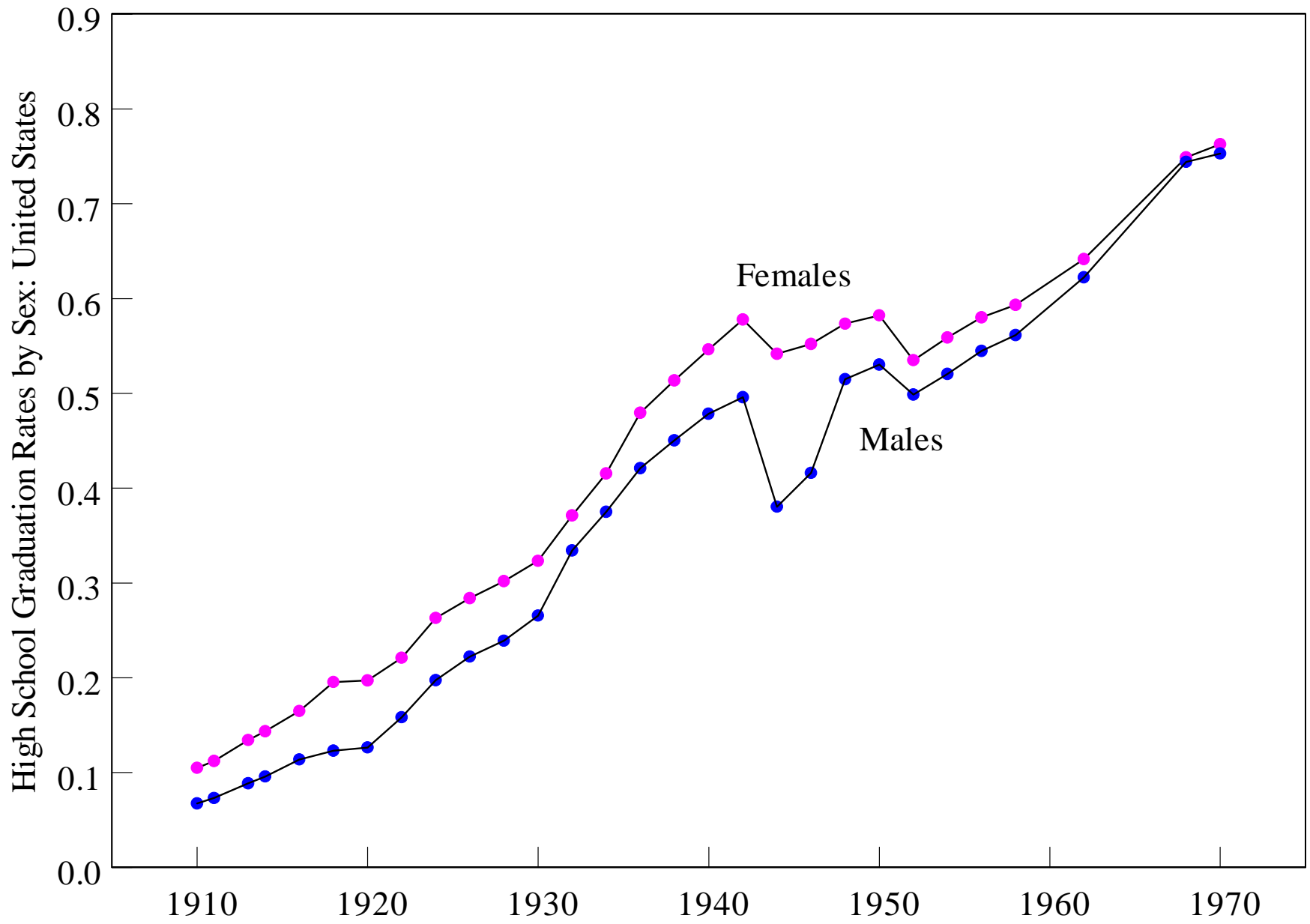
Human Capital in the New World: The “Virtues” of the Past

- Mass education was achieved because the US system was:
 - 1) Open and “forgiving”
 - 2) Academic, yet practical
 - 3) Publicly funded (and provided) by small, fiscally independent districts
 - 4) Secular: Church-state separation
 - 5) Gender neutral: K-12; also college for most years

Years of Schooling at Age 35 Years by Sex and Year of Birth: U.S. 1875 to 1975



High School (Public and Private) Graduation Rate by Sex: U.S. 1910 to 1970



(Male – Female) Rate of Attending and Graduating from College

