ECON 202: Macroeconomics I
Lecture 5 - Growth Facts & Solow Growth

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The Kaldor (1961) Facts of Growth

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5. Constant profit share + constant capital share implies constant return on capital.
6. Some countries grow faster than others.
Output per Capita Grown at Constant Rate (≈ 2% in US)
Capital per Worker Grows at Constant Rate
Constant Capital/Output Ratio
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Return on Capital Roughly Constant
Different Countries Grow at Different Rates

GDP per capita, five regions

1990 Population in millions

UK, USA, Canada, Australia, New Zealand 354
Japan 124
France, Germany, Netherlands, Scandinavia 184
Rest of Western Europe, Eastern Europe, Latin America 986
Asia (except Japan), Africa 3590
One more: Convergence Among Rich Countries

LOG INCOME, EIGHT COUNTRIES

COUNTRIES, ORDERED BY 1870 INCOME LEVELS
United Kingdom
United States
France
Germany
Canada
Italy
Spain
Japan

LOG PER CAPITA REAL GDP

1880 1900 1920 1940 1960 1980 2000
Convergence Systematic

**Countries**

**U.S. States**

*Source: Barro*
But Convergence is Not A Law

Source: Penn World Tables 6.1.
Major questions of growth

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3. Does growth “diffuse” across space?
Tools at our disposal

1. Solow growth model (today)
2. Neoclassical growth model (Thursday + Next Week)
3. Modern Growth Theory (next Thursday)
Key Input to Solow Growth: Savings rate

Income per person in 1992 (logarithmic scale)

Investment as percentage of output (average 1960-1992)
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Jones and Romer (2010) - New Kaldor Facts

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5. Human capital per worker dramatically rising throughout the world
6. Long-run stability of skill premium