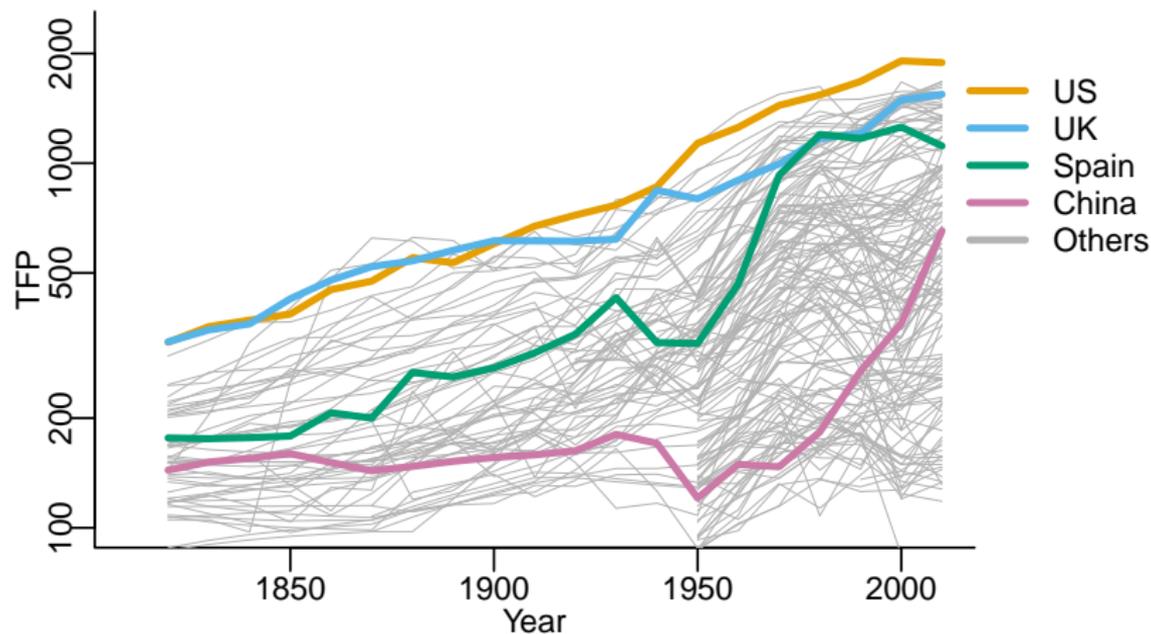


The main proximate cause: technology

Total Factor Productivity (TFP): $Y = AK^\alpha L^{1-\alpha}$

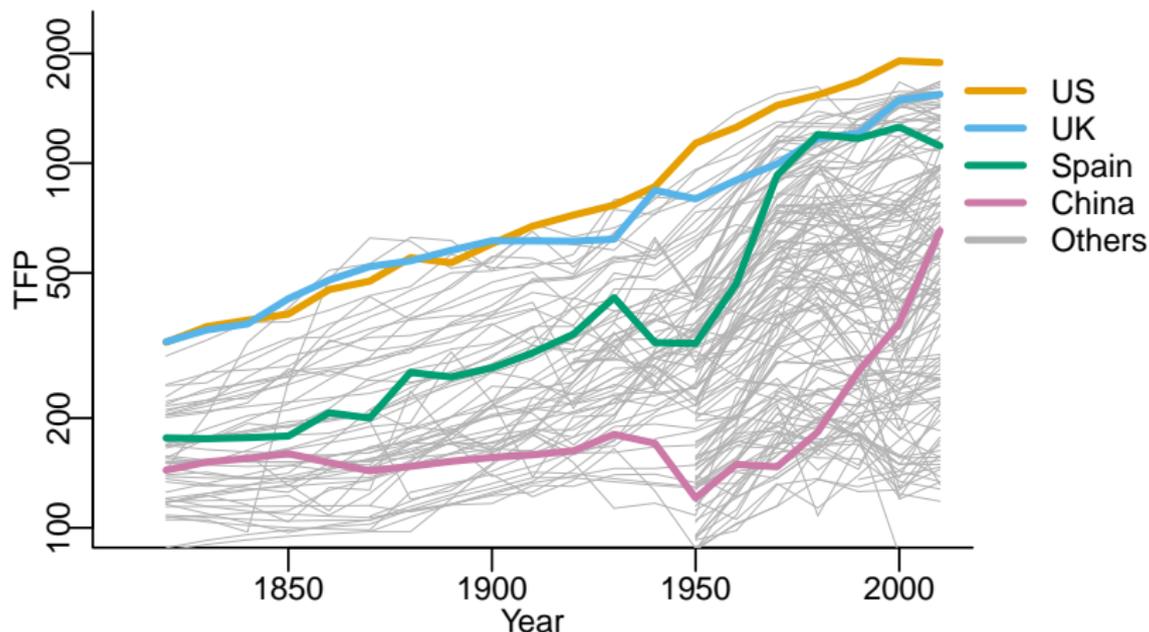
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But why do countries have different technology growth rates?
If incomes tend to converge, then how did they diverge at first?

Causes of income differences

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Proximate causes

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1. Capital
2. Labor
3. Human capital
4. Technology

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Ultimate causes

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Ultimate causes

1. Natural Resources

Causes of income differences

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Ultimate causes

1. Natural Resources
2. Institutions: rules by which the society is organized

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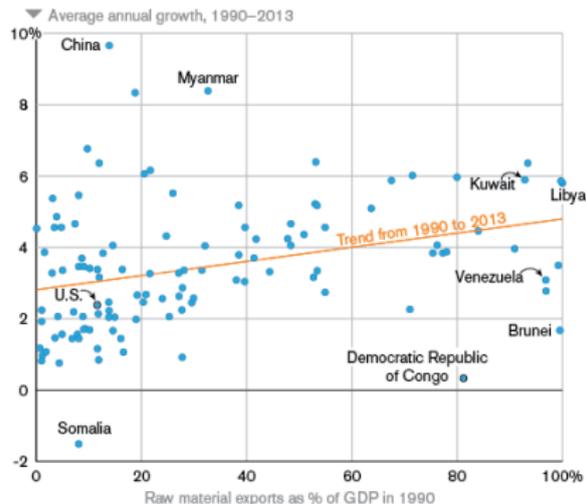
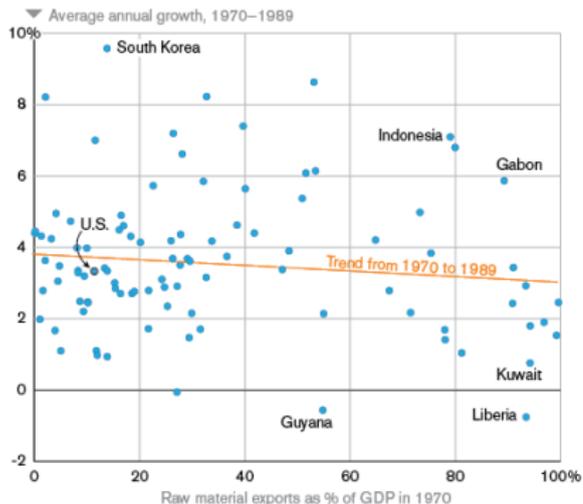
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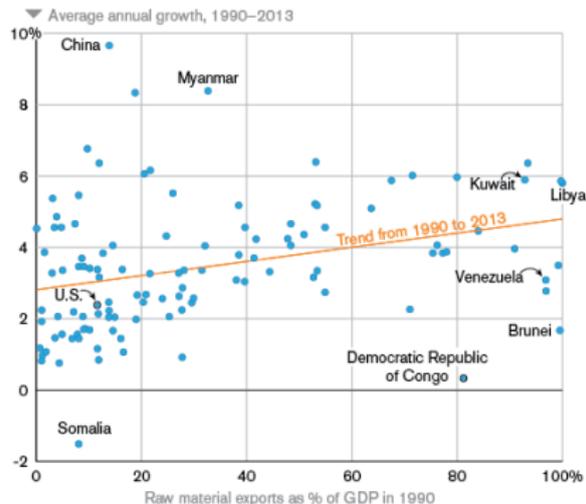
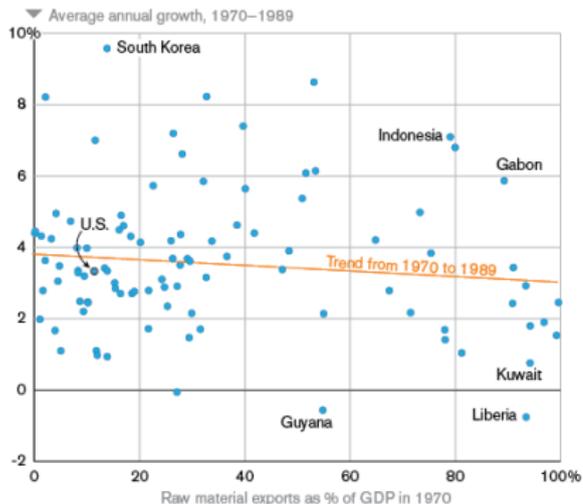
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Natural resource curse? Data from the World Bank



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Can you think of any country that is very wealthy and has abundant natural resources?

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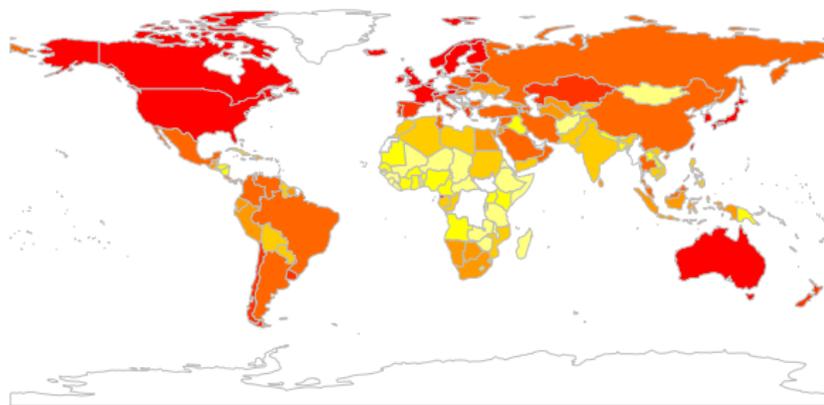
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- ▶ Low, stable inflation
- ▶ Less distortionary tax systems
- ▶ Public provision of public goods where appropriate

Where are people rich?

2010 Income per person (year 2000 \$)



598

64400

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English common law versus French

More on returns to scale

L : labor $\implies H$: human capital

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Some researchers even think that more H makes investments cheaper!

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 - ▶ HC has a comparative advantage in producing more HC
 - ▶ We learn from the people around us
 - ▶ I enjoy people who are smarter than I am

Human capital externalities

Private return to schooling $<$ social return