## Growth Facts

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## The Facts: Economic Growth

We want to understand two sets of facts:

1. Level gaps:

Countries like the U.S. are about 25 times richer than countries like Bangladesh.

2. Growth:

Rich countries today about about 60 times richer than they were in 1700.

## Concepts

How do we measure living standards across countries / over time? One measure that is commonly used:

#### GDP per worker

- what does it measure?
- what does it fail to measure?

# Level Gaps

GDP per capita, relative to United States



#### Source: Jones (2013b)

## Level Gaps

#### Fact

More than half of the world population earns less than 10% of U.S. income per worker.

#### Fact

The gap between rich and poor countries has not decreased at least since 1960.

#### Structural transformation

As countries grew richer, their industry composition changed

- from almost all agriculture
- to almost all services and manufacturing

Developing countries failed to make that transition.

### Industrialization



Source: Caselli (2005)

## Comparative Advantage

#### Fact

Low income countries (appear to) have a massive **comparative disadvantage** in agriculture.

Productivity gap rich vs poor

(90th vs 10th percentile per capita GDP)

- ▶ agriculture: 45 fold
- ▶ industry (non-ag): 4 fold

Do low income countries employ too much labor in the "wrong" sector?

Could the development problem be solved by moving workers into industry?

## Poverty is geographically concentrated



What does this suggest about the origins of income differences? See Acemoglu and Robinson (2001) for more.

Questions:

- ▶ Where do the enormous differences in income come from?
- How long have the rich been rich and the poor been poor?

### Poor Countries Do Not Grow Faster

Growth rate, 1960-2011 7% ∟ South Korea 6% Botswana Taiwan 5% Malta Romania Singapore lanana China China Cyprus 4% Ireland Egypte Hong Kong Panama Argentina 3% Brazil Cape Verde India Tunisia. Malavsia Luxemboura Morocco ates 2% Lesotho. Paraguay Burkina Faso Philippines\* Guatema 1% Ethiopia Gabon Malaw Namibia Trinidad/Tobago Togo 0% Comoros Cote divoire Jamaica • Venezuela Madagasca -1% C. Afr. Republic Niger Congo • Guinea -2% 1/64 1/32 1/16 1/8 1/41/21 GDP per person (US = 1) in 1960

Fig. 26 The lack of convergence worldwide. Source: The Penn World Tables 8.0.

Source: Jones (2016)

No "convergence."

## Persistence Over Time

GDP per person (US = 1) in 2011



#### Source: Jones (2016)

There is mobility, but also a lot of persistence over time.

## Summary

#### Enormous level gaps:

- Rich countries are 25 times richer than poor countries.
- Big productivity gaps in agriculture.
- ▶ Poor countries seem to specialize in the "wrong" sector.
- Poor and rich countries cluster geographically.

#### Postwar growth:

 No convergence: poorer countries do not generally grow faster.

### Questions to think about

- 1. Why are the rich countries so much richer than the poor ones?
- How could one answer such a question?
  E.g.: "How much does lack of capital contribute to low incomes?"

# Reading

- Jones (2013b), ch. 1
- Blanchard (2018), ch. 10
- Blanchard and Johnson (2013), ch. 10

A good place to access data on long-run growth: The Penn World Tables

At knoema, users can generate graphs using data from a wide range of sources.

For further reading:

- ▶ Jones (2013a), ch. 3 (explains logs and ratio scales)
- Acemoglu (2009), ch. 1 (summarizes the facts)
- ▶ Jones (2016) contains an exhaustive list of growth facts

## References I

- Acemoglu, D. (2009). *Introduction to modern economic growth*. MIT Press.
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- Caselli, F. (2005). Accounting for cross-country income differences.In P. Aghion and S. N. Durlauf (eds.), *Handbook of Economic Growth*, vol. 1B, *9*, Elsevier.

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