

CEE Growth & Development

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UPCES
Lecture 1

Spring Term 2014

Growth and Development in CEE

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 - Tuesday, 14.00h - 15.00h, CERGE office #322
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Growth and Development in CEE

Text

- Main:
 - Weil, D.N. (2012). *Economic Growth*
- Secondary:
 - Clunies-Ross *et al.* (2009). *Development Economics*
 - Acemoglu, D. (2009). *Introduction to Modern Economic Growth*
- others...
- Fiction:
 - Kapuściński *Imperium*
 - Ugrešić *The Culture of Lies*
 - Johnson *Central Europe: Enemies, Neighbours, Friends*

Grading

- Final examination 40 per cent
- Mid-term examination 30 per cent
- Participation 30 per cent
 - Activity 10 per cent
 - Project 20 per cent
 - Comment on three journal articles related to topics covered in class.

Project Resources

- The Economist library & (www.economist.com)
- Transition Online (www.tol.org)
- EBRD, Research and Publications (www.ebrd.com)
- Local Online Publications
 - Prague Daily Monitor (www.praguemonitor.com)
 - The Warsaw Voice (www.warsawvoice.pl)
 - And many more...

Week's Topic

Growth and Development in CEE

- Growth vs. Development
- Measures of Growth and Development

- CEE



Growth and Development in CEE

Definitions

Definition (**Growth**)

- 1 Process of growing toward full size or maturity, development.
- 2 Increase, as in size, importance, or power.

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Example

” Note that when economists talk about ‘economic growth,’ they have in mind growth [...] over long periods of time; in the literature on transition economies, we use ‘growth’ in a more literal sense, that is, as referring to the short-run dynamics of GDP per capita or labor productivity.”

GDP vs GNP

$$GDP_t = p_t q_t$$

$$q_t = q_{\text{domesticowned},t} + q_{\text{foreignowned},t}$$

$$GNP = (p_t q_{\text{domesticowned},t}) + (p_t q_{\text{abroadbynationals}})$$

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Can $GNP > GDP$?

Growth Rate, $g(t)$

$$\frac{y_{t+1} - y_t}{y_t} = g_t$$

$$y_{t+1} = y_t(1 + g_t)$$

y_t is pc output at time t , and
 g_t is the growth rate

$$y_{t+n} = y_t(1 + g)^n$$

$$\frac{\dot{y}}{y} = g$$

$$\dot{y} = \frac{d}{dt}y$$

$$g = \frac{d}{dt} \log y$$

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Economy in the future

- Czech economy grows 3.2 per cent annually
- How Czech economy will compare with current level in 10, (25, 50) years?

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<i>now</i>	100
10y	137
25y	220
50y	483

Growth Rate, $g(t)$

Different Growth Rates

- Czech Republic and Poland have similar economies
- Czech economy grows 3.2 per cent annually
- Polish economy grows 4.5 per cent annually
- How Czech and Polish economies will compare in 10, (25, 50) years?

Growth Rate, $g(t)$

Different Growth Rates

- Czech Republic and Poland have similar economies
- Czech economy grows 3.2 per cent annually
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- How Czech and Polish economies will compare in 10, (25, 50) years?

	<i>Czech</i>	<i>Polish</i>
<i>now</i>	100	100
10y	137	155
25y	220	300
50y	483	903

Double production

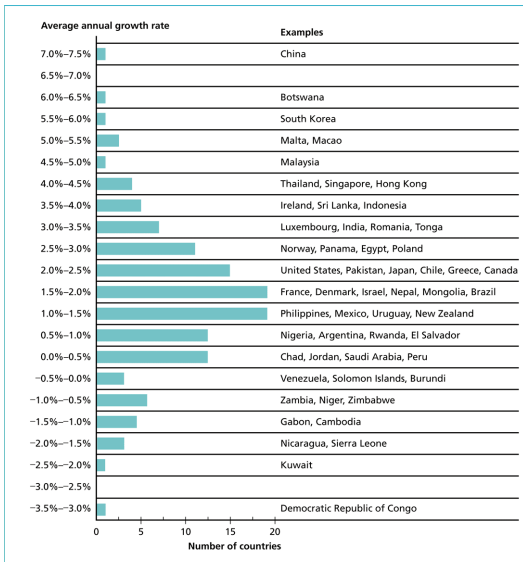
$$y_{t+n} = 2y_t$$

$$2y_t = y_t(1+g)^n$$

$$\log 2 = n \log(1+g)$$

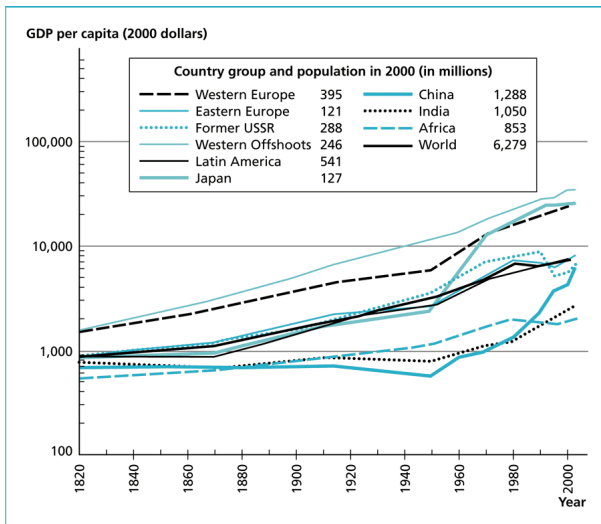
$$n \simeq \frac{\log 2}{g} \left[\simeq \frac{70}{g\%} \right]$$

Growth Rates (Weil, 2012)



Sources: Heston, Summers, and Aten (2006), World Bank (2007a).

World Trend (Weil, 2012)



Source: Maddison (2001), Heston, Summers, and Aten (2006).