ECGA 6470: Economic Growth & Development   Course Calendar   Spring 2017

See the course syllabus for books and videos as well as course requirements. For most HW assignments including the readings you need are linked to the questions. As you can see out special focus this semester will demography and growth, in all its dimensions: migration, inequality (Piketty), secular stagnation (Japan) refugees and long term growth in Germany, the demographic dividend for Africa, potential and realized. Jones & Vollrath have slides and useful web pages for Jones 3rd edition and a growth blog. Please do watch the FT video on China's "Lewis Turning Point" and "Don't Panic" if you have not already.

Feb. 22nd Lecture: Please review Problem Set #2 **please turn in** #2.1 and 2.4 by midnight Tuesday Feb. 16th   UNU Wider Extractives initiative Sample answers for PS #1 (please see posted sample answers and use posted answers…).

Midterm Review questions: 3.1 a) A recent NY Times story on Robots and the American Dream tell us not to fear robots, what endogenous growth model best fits this argument promising us eternal growth (PhD students: present this model formally using Barro and Sali-i-Martin as cited in these lecture notes… EC please redraw this Figure using excel if you can… b) Like Piketty, 2014 this model implies a rising capital share, which is how Solow, 2014 reads his argument. Does a rising capital share imply rising capital income share? How does Piketty explain the rising share of capital (see his ASSA 2015 Webcast paper). C) are the best days cut-throat capitalism over. What does the experience of Extractive States tell us about a future with no factory jobs (good and bad of courses)? Should we make America Denmark as BS argues, or are there other alternatives? D) Viewing Hans Rosling carefully what he argue the relationship between health and economics growth? It this consistent with the argument of Acemoglu et al.   E) In what sense, do all of us development economists owe Hans Rosling? (I mean literally as in $$). Why was his comparison of chimps and Swedish students a little unfair? How did Rosling contribute to literally and figuratively to the African Miracle (pun warning and see Young, 2014).

Feb 15th Lecture: Demand side poverty traps Government and Economic Growth (demand side poverty traps and Barro growth model with government) Notes on Convergence Convergence 2015 Sigma vs Beta convergence Barro's AK Model with Government Long version Phd

 Putting Distribution back at the Center of Economics   From Hindu growth to Productivity surge   Krugman the end of Growth? PBS Newshour Are the U.S. best days over   Krugman review of Gordon   please reread Dixit and Stiglitz

Feb 7th Lecture: Before class please review the problem set #1 *problems 1.1-1.3, these will be due before our next meeting Feb. 8th* **HW#2** Please turn in answers to problems 1.1 and 1.2 by Sunday Feb 4th midnight by uploading a word or pdf file to the GDrive you should receive by Saturday* **and** by email to mcleodassign@gmailcom [sample answers]. HW#3 answers to 1.3 due Tuesday Feb. 7th at midnight. Also please read about the demographic dividend in the Overview and Chapters 4-5 of WB/IMF (2016) Global Monitoring Report 2015/2016 *Development Goals in an Era of Demographic Change*. See Poverty and Growth slides and the Growth Strategies slides Sachs et. al. 2004 article on Africa's poverty trap.   *If the google drive does not work, sending it to

January 25th: Growth Strategies (updated) Three Growth Models Handout Poverty and Growth Sachs et al. 2004 Africa's poverty traps Growth Models and Miracles Lecture 2 Piketty Lindhhal Lecture J. Sachs why China's growth is slowed in last few years: answer the renembi/yuan is too strong, We may disagree with Professor Sachs on other issues but…World Bank; IMF (2016) Global Monitoring Report 2015/2016 (download free pdf) *Development Goals in an Era of Demographic Change*. Washington, DC: World Bank. This lecture will continue our discussion of Africa and growth theory, models and poverty traps, there are the relevant sections from the syllabus, but don't read everything (just take a look at the items with at *). Going forward we will try to say a little bit about growth strategy and use case studies during each class. Angus Deaton recent noble prize winner, perhaps for identifying the "most serious intellectual and ethical failures of a century"). See my web page for all links to this course (www.darrylmcleod.com)

January 18th Elephant Diagram lecture notes see also the updated course texts and books of interest preview.

Please answer LDQ questions 0.1 and 0.2 as best you can, using the formatting tips below, and send them to mcleodassign@gmail.com by midnight January 24th (if possible) as a word file (preferred) or pdf attachment. Here I as word template which may be helpful Sections in italics are optional. Please add all the references you cite to the

references I include below. Feel free to ask questions in class. Please email your answers mcleodassign@gmail.com by midnight January 24th. Write your answer single spaced after each question mark (?) in a different font (not dark red for example). Please put answers right after each question (though you may say things like, "as discussed above." Use this word template if you want to. Please do cite, quote and "snip" graphics where possible.

 LDQ 0.1 There are three key points on the Elephant diagram, see Figure 1.1 from Milanovic (2016) chapter 1. The points represent groups from what countries/regions? (careful, these change over time, as Corlett, 2016 points, but Milanovic and Lakner 2016 correct for this as well, see their reply. B) How does Baldwin explain and populate these three points or on the elephant curve (see his PIIE talk and/or his slides)? Compare Baldwin's explanation of the of the top 1% to that of Milanovic and Piketty (would the former refer to Donald Trump as a plutocrat?). *C) This* IMF review *identifies the losers in Figure 1.1, but are they really losers (relatively yes, absolutely perhaps not, as a group). What are the groups in this growth incidence curve?* Did the MDGs work? a) How do MacArthur and Rasmussen, 2061 come up with their numbers? (see their full paper too if you have time[1]). Do you find their numbers credible? *b) Compare with Easterly's argument that the MDGs were designed to make SSA look bad.*

LDQ 0.2 Discuss how the one child policy at first enhanced but now may hinder China growth prospects? What can/is China do to increase growth and hang on to its factories? Hint: Vietnam. Would or has this solution work for the U.S. and the UK?

 References
*Baldwin, Richard (2016) The Great Convergence, Harvard University Press, ISBN 0674660489

Milanovic, Branko (2016) *Global Inequality A New Approach for the Age of Globalization* Harvard University Press, Cambridge, MA. Chapter 1
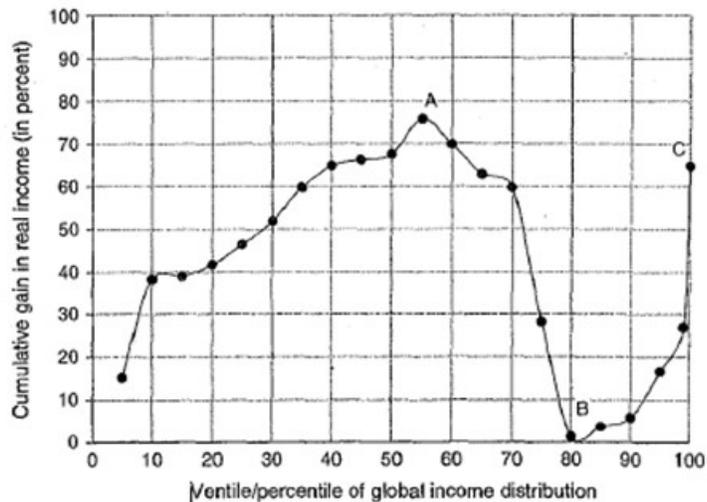

FIGURE 1.1. Relative gain in real per capita income by global income level, 1988–2008

This graph shows relative (percentage) gain in real household per capita income (measured in 2005 international dollars) between 1988 and 2008 at different points of the global income distribution (ranging from the poorest global ventile, at 5, to the richest global percentile, at 100). Real income gains were greatest among people around the 50th percentile of the global income distribution (the median; at point A) and among the richest (the top 1%; at point C). They were lowest among people who were around the 80th percentile globally (point B), most of whom are in the lower middle class of the rich world. Data source: Lakner and Milanovic (2015).

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[1] *I do not know Krista Rasmussen, but John McArthur worked at UNDP joining the Poverty Group just as I left when I was there. He was PhD student at the time, we will soon read another article he coauthored on poverty traps in Africa.*

These are copied from syllabus for your convenience…

1. Introduction: From Poverty Trap to Growth Miracle? Africa since 1995 ;see *Sachs et. al BPEA Ending Africa's Poverty Trap pp. 121-31 Pinkovskiy, M and Xavier Sala-i-Martin (2015), "Lights, Camera, Income: estimating poverty " SR 669 New York Federal Reserve Young, Alwyn. (2012). "The African Growth Miracle" *Journal of Political Economy* 120,#4, 696-739. McMillan, M. S., & Harttgen, K. (2014). What is driving the'African Growth Miracle'? (NBER 20077). Rodrik, D. (2014). *An African Growth Miracle?* (NBER w20188).

2. Three Growth Models plus the MRW-Augmented Solow model, see the *growth models handout *Jones, 2002 or 2013, 2nd or 3rd edition *Chapter 1   Chapter 2 and Chapter 3, & App A-C

Feb. 24th: Case Study Literature Review **Inequality and Growth lecture Two growth models Aghion Bolton** Inequality Measures (youtube)   Aghion Williamson 1998

Case study/steady state peers/twins: Jones Appendix C 3rd Edition, 2008 data   Peer Groups Various Years %US GDP Spreadsheet PWT 7.1   Jones data 1960 Peers   Jones data with 2015 PWT 8.0 TFP for Steady states

**Feb 15th:** BSIM Chapter 1; BSIM 2nd Ed Sala-i-Martin Just ran 4 million regressions Growth Accounting Aid and growth in Africa Aid and Growth: Meta-Analysis; Lecture review: Savings and Economic Growth; Population and Economic growth; the Harvard CID theory of Economic Growth: Michael Kremer, 1993 & Ricardo Hausmann 2015 30 minutes   1.5 hours

Feb 8th:
: Long version Phd   Putting Distribution back at the Center of Economics   From Hindu growth to Productivity surge Krugman the end of Growth? PBS Newshour Are the U.S. best days over Krugman review of Gordon   please reread Dixit and Stiglitz

Feb 8th: Econ 6470 HW#1 (10 points) Using PS1 v3 turn in HW#1 on Blackboard on Feb 9th consisting of answers to questions 1.1a or 1.1b and 1.2a or 1.2b and 1.3b start with this word template, type your answers single space in a clearly different font as in this example use Word to write equations, subscripts, etc. where necessary. You can add photos of hand drawn Figures and equations if necessary, as in the example above. Use snipping tool or Mac equivalent to copy figures from lecture notes or other sources, be sure to clearly reference quotes, Figures, Tables or arguments using the standard APA format reference (author,date, page). Add references at the end unless they are on the syllabus.

Figure 1: GDP per person in the United States

LOG SCALE, CHAINED 2009 DOLLARS

2.0% per year

YEAR
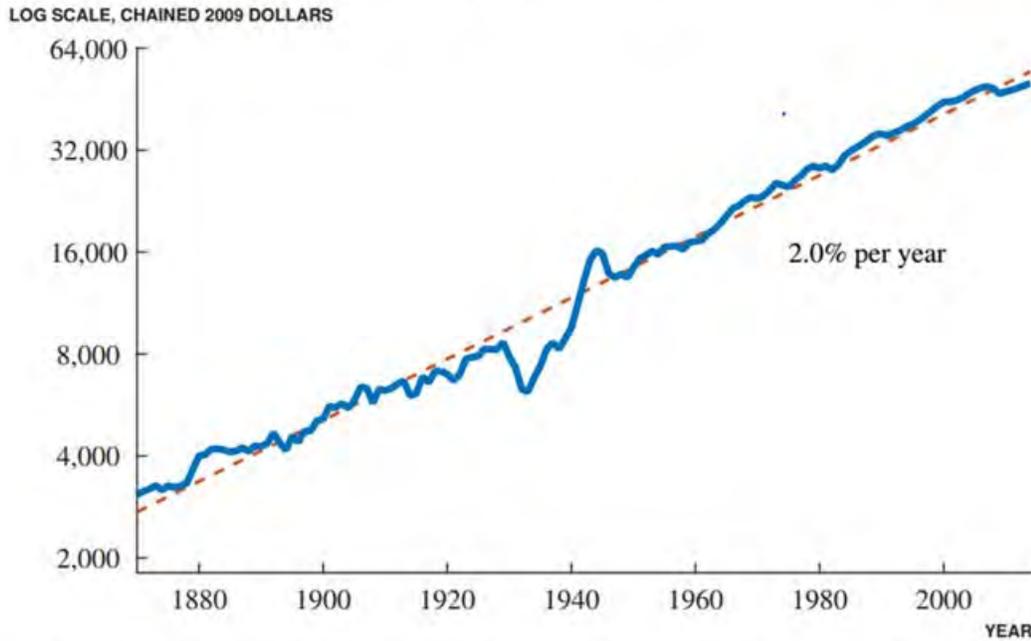
Note: Data for 1929–2014 are from the U.S. Bureau of Economic Analysis, NIPA Table 7.1. Data before 1929 are spliced from Maddison (2008).

Source: Charles Jones, 2015 The Facts of Economic Growth

Roads Less Taken

Building infrastructure is a popular way to try to juice economies, but such spending varies greatly.

Real public investment
As a percentage of GDP*

Infrastructure spending by country or region (1992-2011)
Weighted annual average as a percentage of GDP
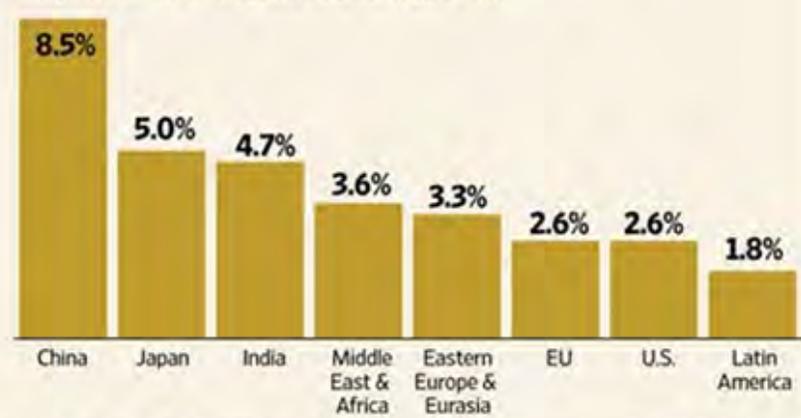
*Weighted for purchasing power parity   Sources: IMF(investment); McKinsey Global Institute (spending)   The Wall Street Journal

Figure C-2 Convergence, "big-time" 2000-2013

These 12 "above the line" countries are home to almost 4 billion people.

$y = -0.0307x + 3.64$
(-4.92) (15.4)
$R^2 = 0.15$

Average per capita growth rate

2000 $PPP GDP as % of U.S.

Source: IMF WEO database October 2012 the size of each bubble is proportional to the population of that country.
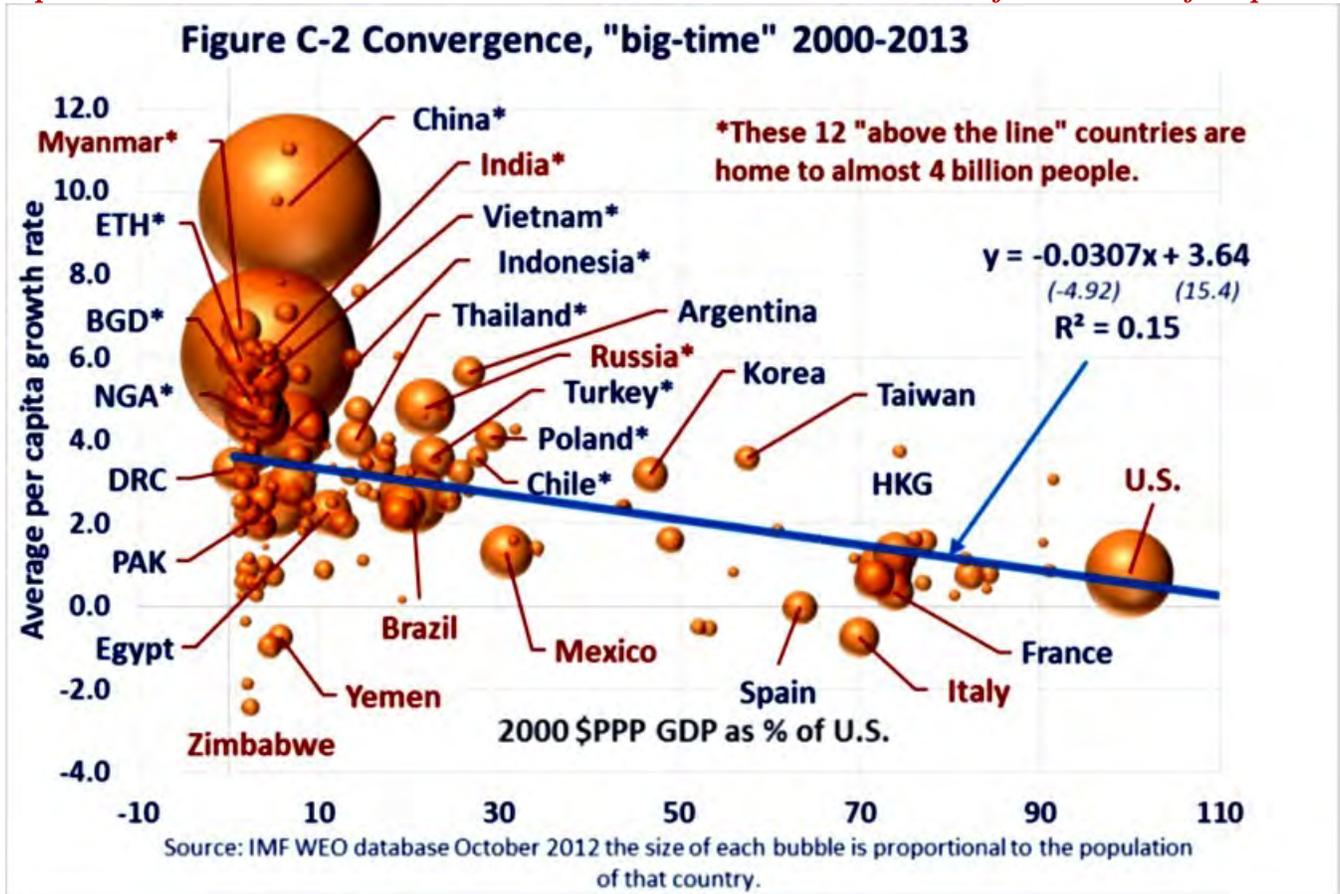
Figure 1.1 Growth Convergence post 2000
(source: WEO April 2013 database)

- Advanced economies
- Emerging market and developing economies
- World

Figure SSA-2 GDP per capita $PPP constant 2005 U.S. Prices

Source: World Bank, WDI online data base, January 2012
databank.worldbank.org/ddp/home.do?Step=1&id=4
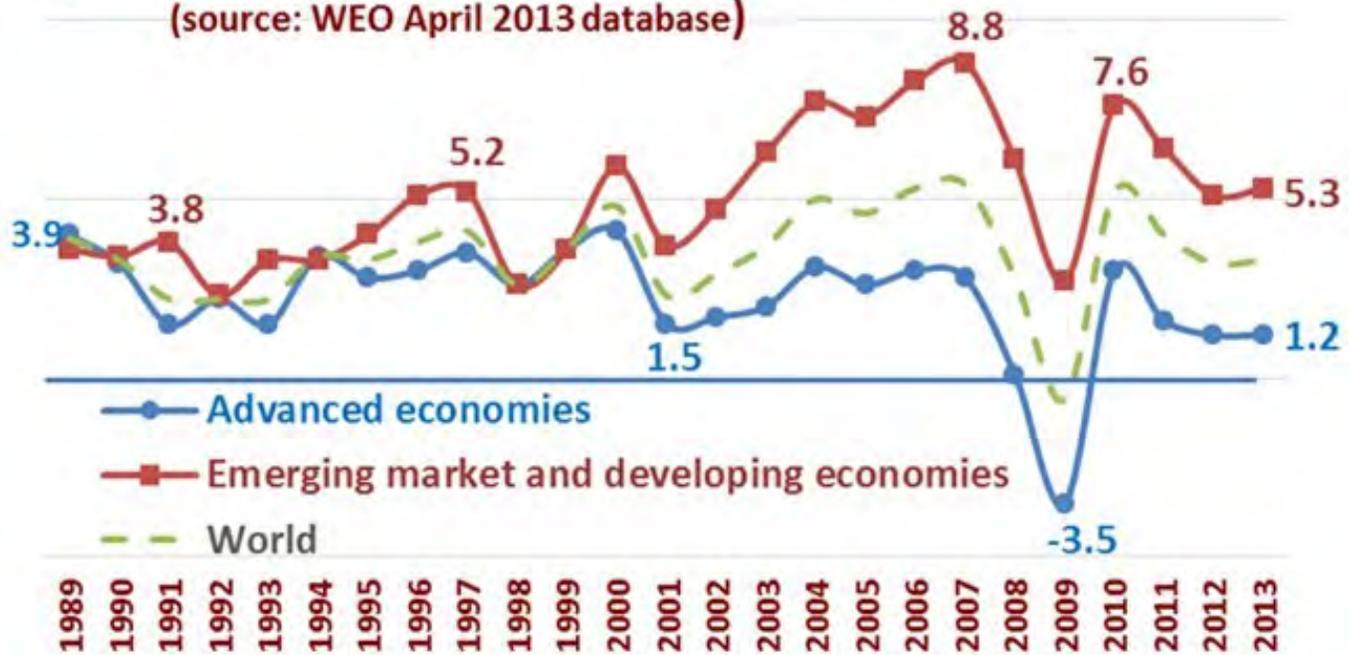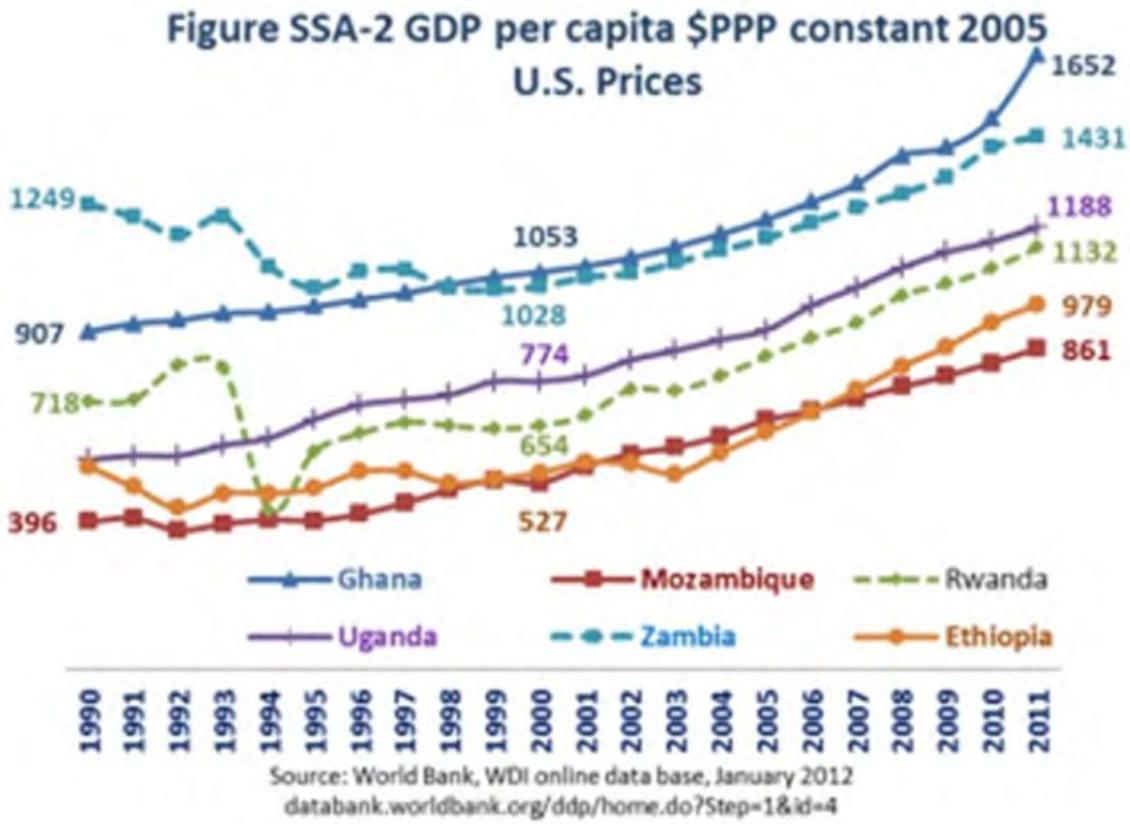
Figure 10

Figure 2.4: Annual growth rate for per capita income in Brazil, by percentile, 2001-2007
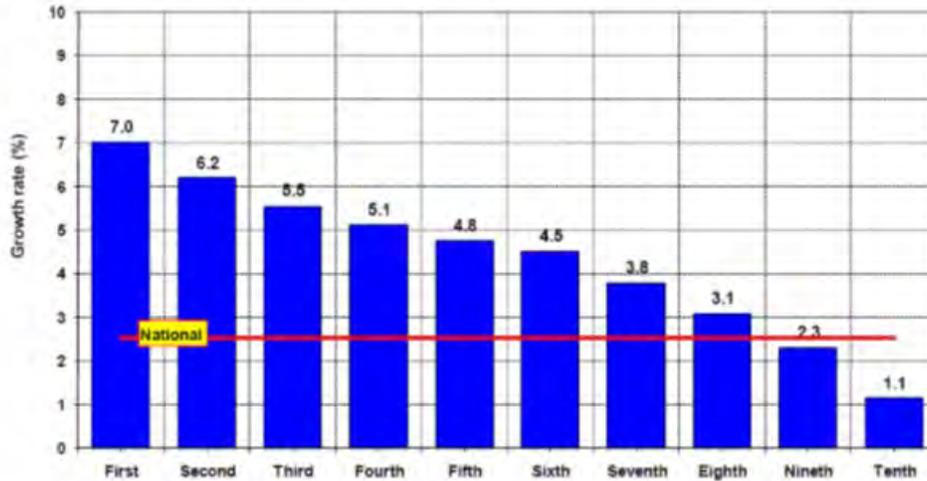
Source: Estimates based on Pesquisa Nacional por Amostra de Domicilios (PNAD) - 2001 and 2007.

Source: Barros et al. (2009).

The greatest *American* economic thinker of the last century was a Yankee tinkerer, teetotaler, and TB survivor. Trained in mathematics but desiring "contact with the living age," Irving Fisher invented the rolodex, the consumer price index, and the economic forecast. By the 1920s, Fisher *(bottom, left)* was America's economic oracle, wellness guru, and stock picker, his celebrity rivaling that of Alexander Graham Bell *(right)*.

In a postgraduate year in London, Joseph Alois Schumpeter rode, fenced, dressed, and talked like one of the Viennese aristocrats he wished to be taken for. He spent most of his time at the British Museum writing a book criticizing economic theory for ignoring how the economy evolved over time.

After marrying impulsively, Schum-peter rushed off to Egypt, the miracle economy of the Belle Epoque, to make his fortune as a lawyer and money manager. In Cairo, he found inspiration for his greatest work, *The Theory of Economic Development*.

See also the FTP reader: type ftp.povertylectures.com/ into your favorite browser window then use econ6470@povertylectures.com and password: Piketty (caps matter) to get access to or download core readings including book excerpts. Under Spring2015 see especially the directory Piketty…. http://class.povertylectures.com/

Recommended growth & development books and videos (we read selected chapters):

U.S. Employment in Manufacturing Industries
Thousands of Jobs, 1980-2014

Source: Brookings Analysis of Moody's Analytics Data
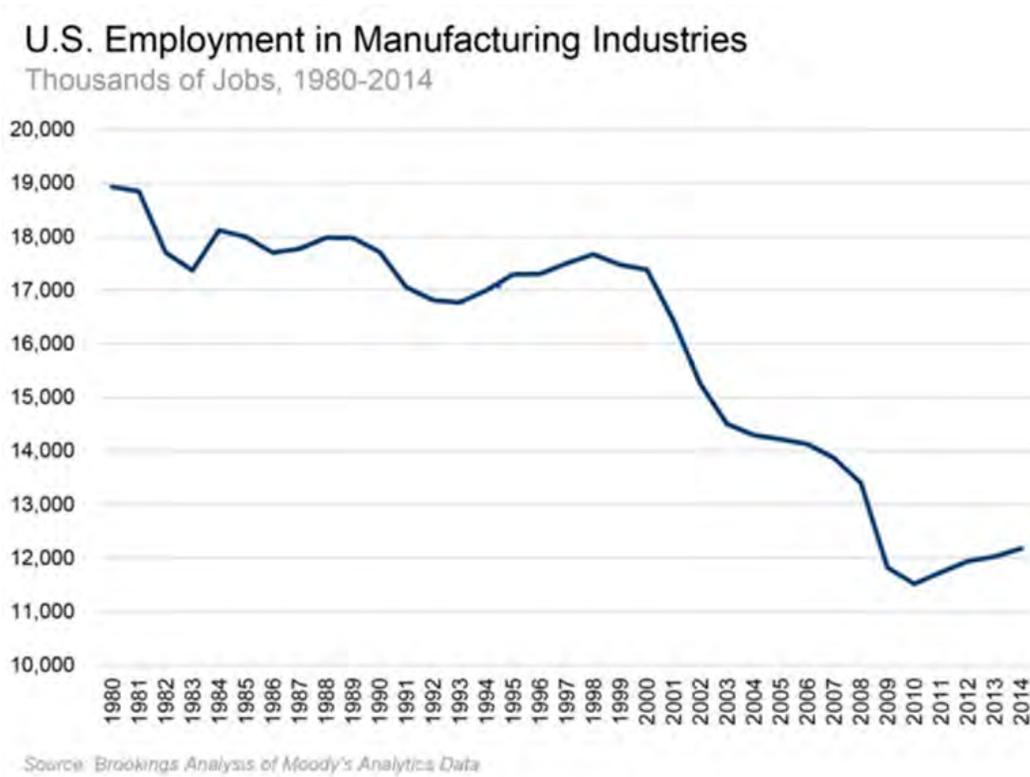
**B | Metropolitan Policy Program**
at BROOKINGS

http://www.brookings.edu/blogs/the-avenue/posts/2016/03/15-voter-anger-explained-muro-kulkarni?utm_campaign=Brookings+Brief&utm_source=hs_email&utm_medium=email&utm_content=27268332&_hsenc=p2ANqtz-9c1Ff4QErQuhTCV3d9PUqU3lh26zaLS6N850YZrm03FyTtqKJ6ZMc8_4jWWWTJB2qNCxrnNfXUn5tIkJdG2dgQ6RTFuA&_hsmi=27268332

# DEVELOPMENT IN AN ERA OF DEMOGRAPHIC CHANGE: A SNAPSHOT

Global demographic change is intense: the working-age share peaked, the population grows much slower and ages at record speed.


- Share of working age population (left axis)
- Population growth rate (right axis)
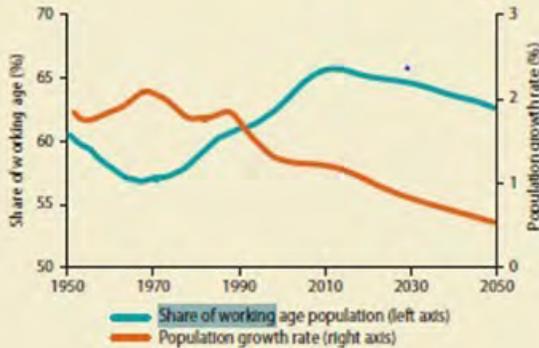
Underneath global trends lies stark diversity, with countries facing different opportunities to capture demographic dividends.

- 1980–2015
- 2015–50
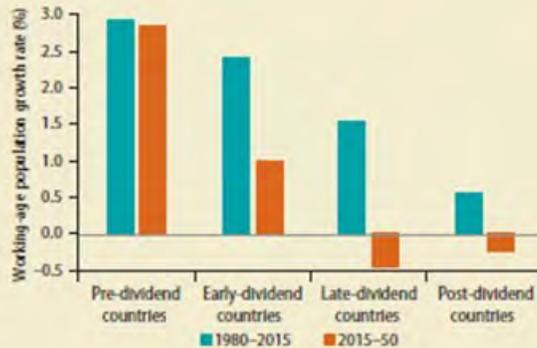
Pre- and early-dividend countries need to spark demographic transition, invest in human development and create jobs for the youth bulge.

- Pre-dividend countries
- Early-dividend countries
- Late-dividend countries
- Post-dividend countries
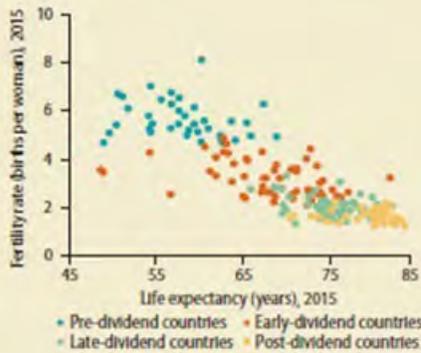
Late- and post-dividend countries need to sustain productivity growth amidst demographic headwinds, and adapt institutions and policies to rapid population aging.

- Pre-dividend countries
- Early-dividend countries
- Late-dividend countries
- Post-dividend countries
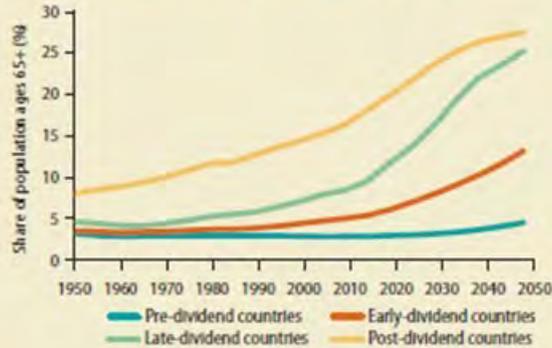
Demographic fault lines separate *centers of global poverty* needing further development and *engines of global growth* facing rapid aging.

- Share of global GDP growth
- Share of global poverty

Freer flows of capital, trade and, especially, people present an increasingly compelling global opportunity to arbitrage demographic diversity across countries.

- From post-dividend countries
- From late-dividend countries
- From early-dividend countries
- From pre-dividend countries
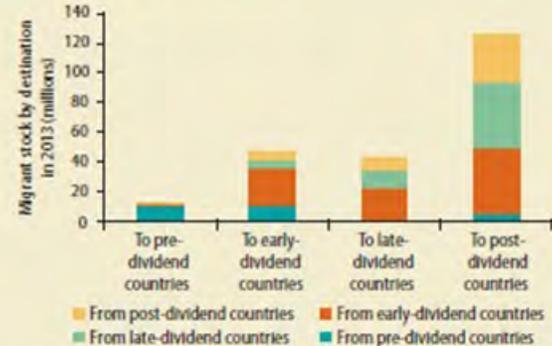
Sources: UN (2015), PovalNet (2015), World Development Indicators (2015).