



# **Emerging Markets at a turning point**

**Columbia Global Centers**

**Santiago, Chile**

**Julio 3, 2018**

**Alonso Martinez**

**Senior Lecturer**

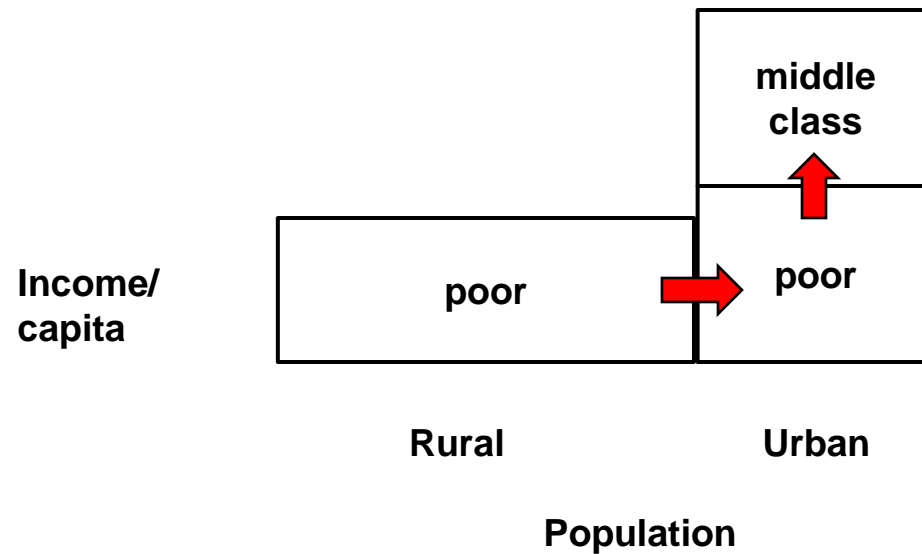
**Columbia Business School**

**[am3638@columbia.edu](mailto:am3638@columbia.edu)**

# Emerging Markets at a turning point

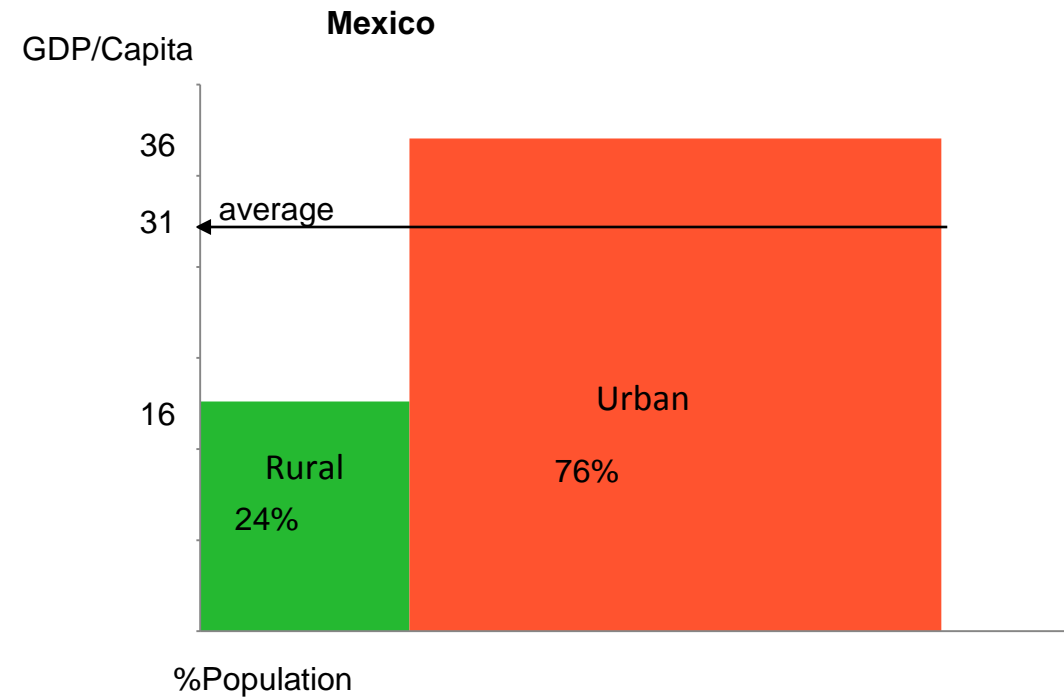
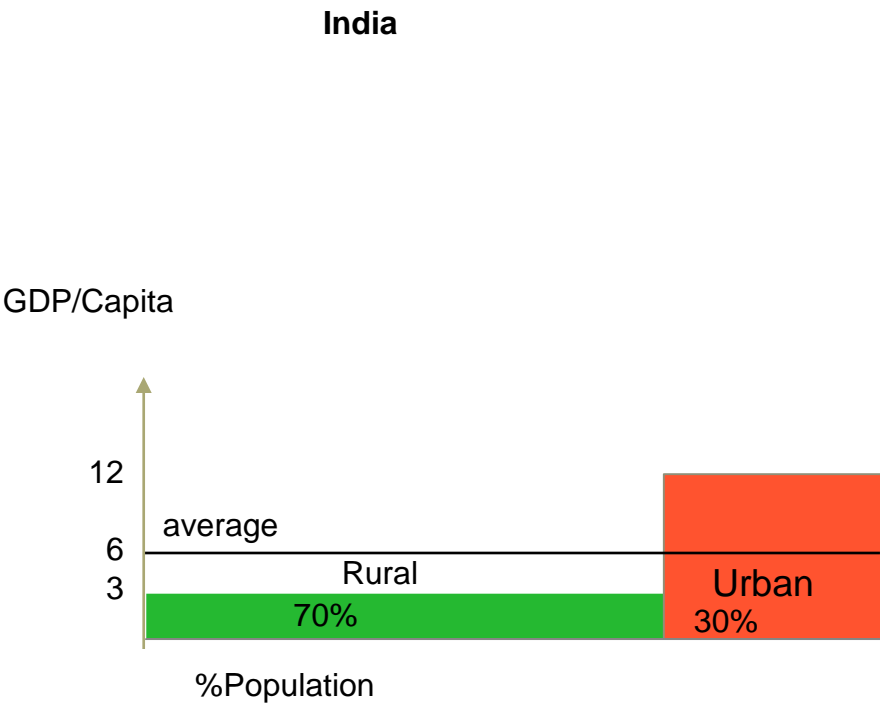
- ▶ Emerging markets in my lifetime
- ▶ The Changing Landscape
- ▶ The turning point
  - New global order
  - Changing demographics
  - Resource challenges
- ▶ Emerging markets in your lifetime
  - New challenges
  - New opportunities

# Rural / urban development – my simple model



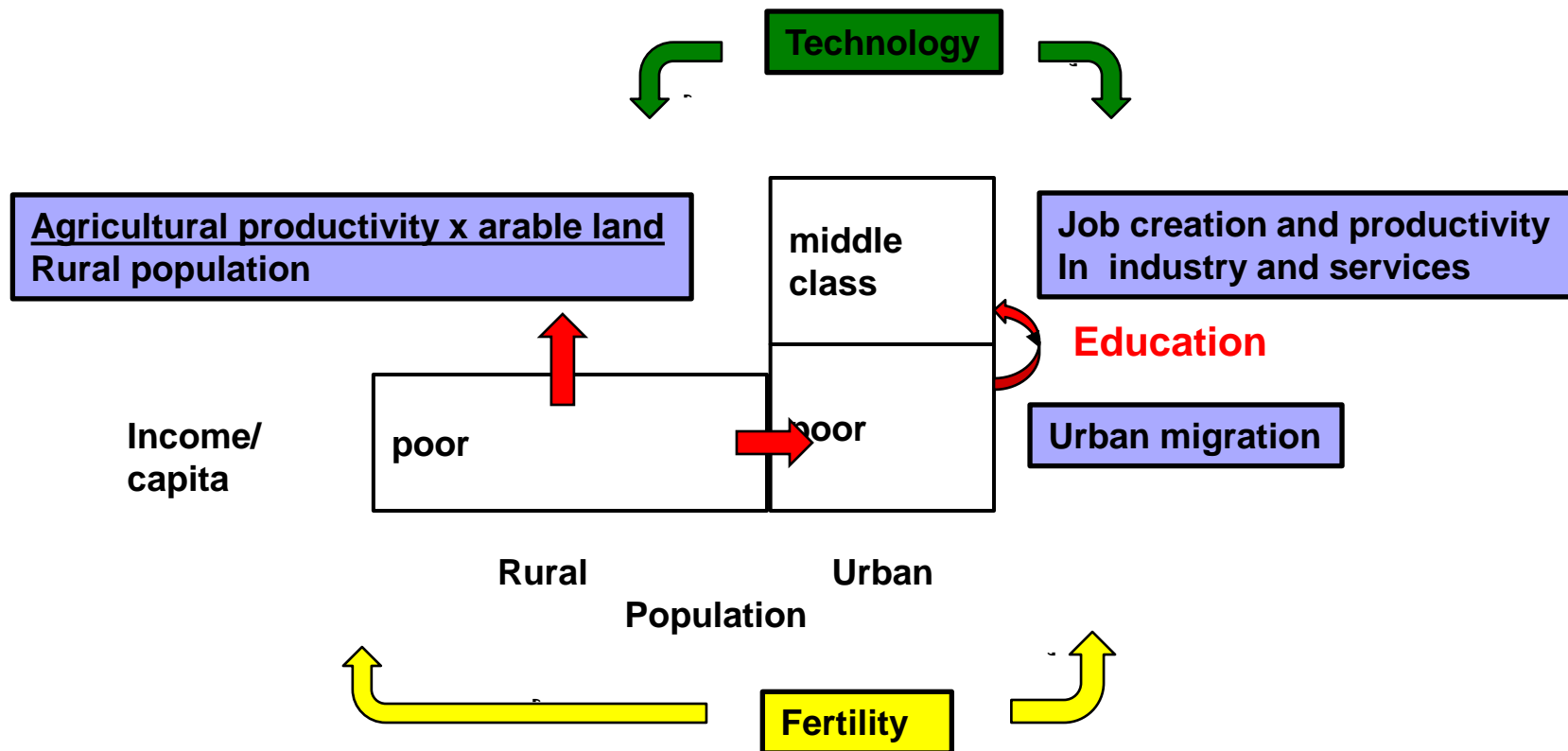
# Rural / urban development – examples

Population vs. GDP/Capita PPP 2010 (US=100)\*

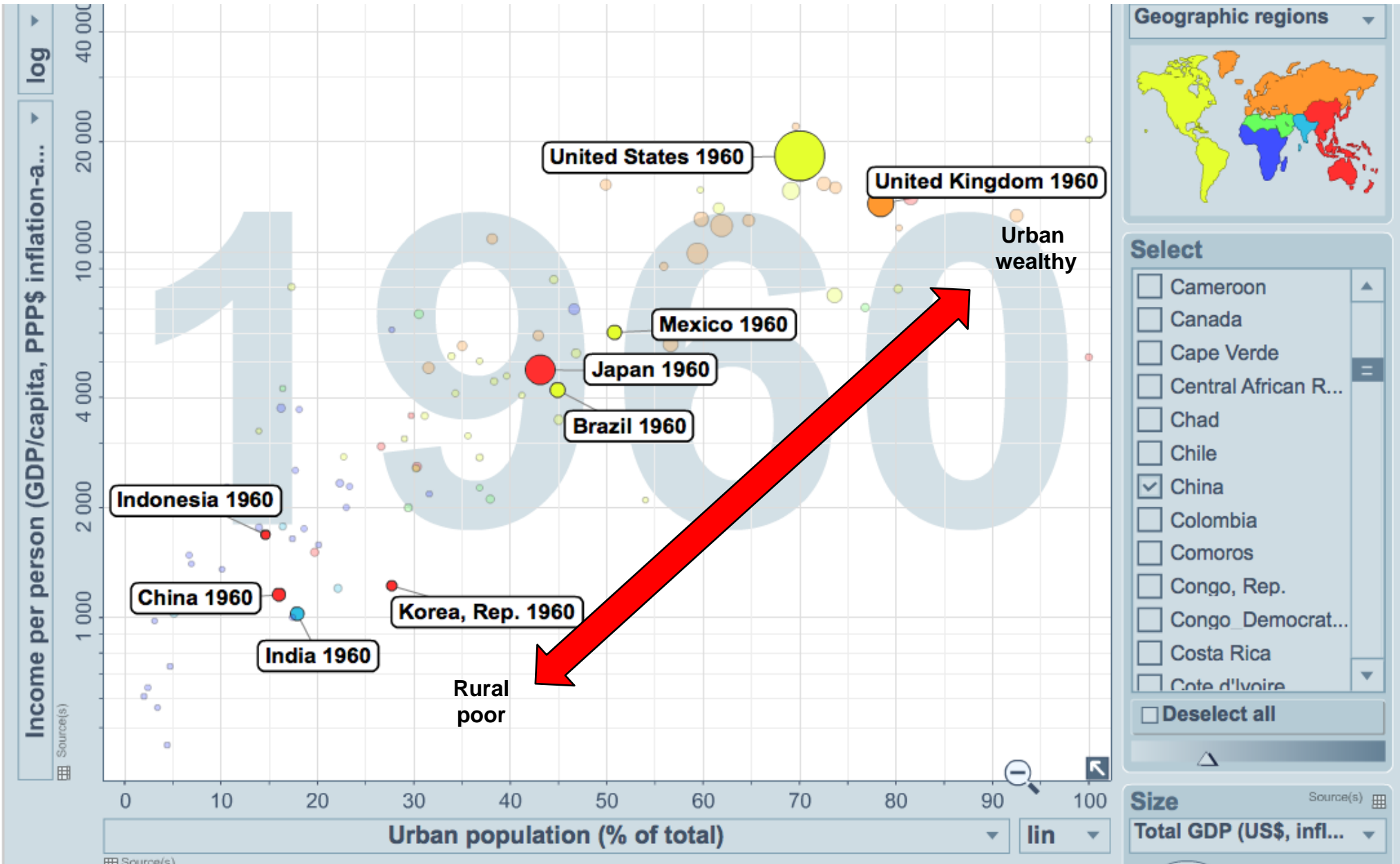


\* Estimates based on The Economist Intelligence Unit, Price Waterhouse Cooper and country statistics

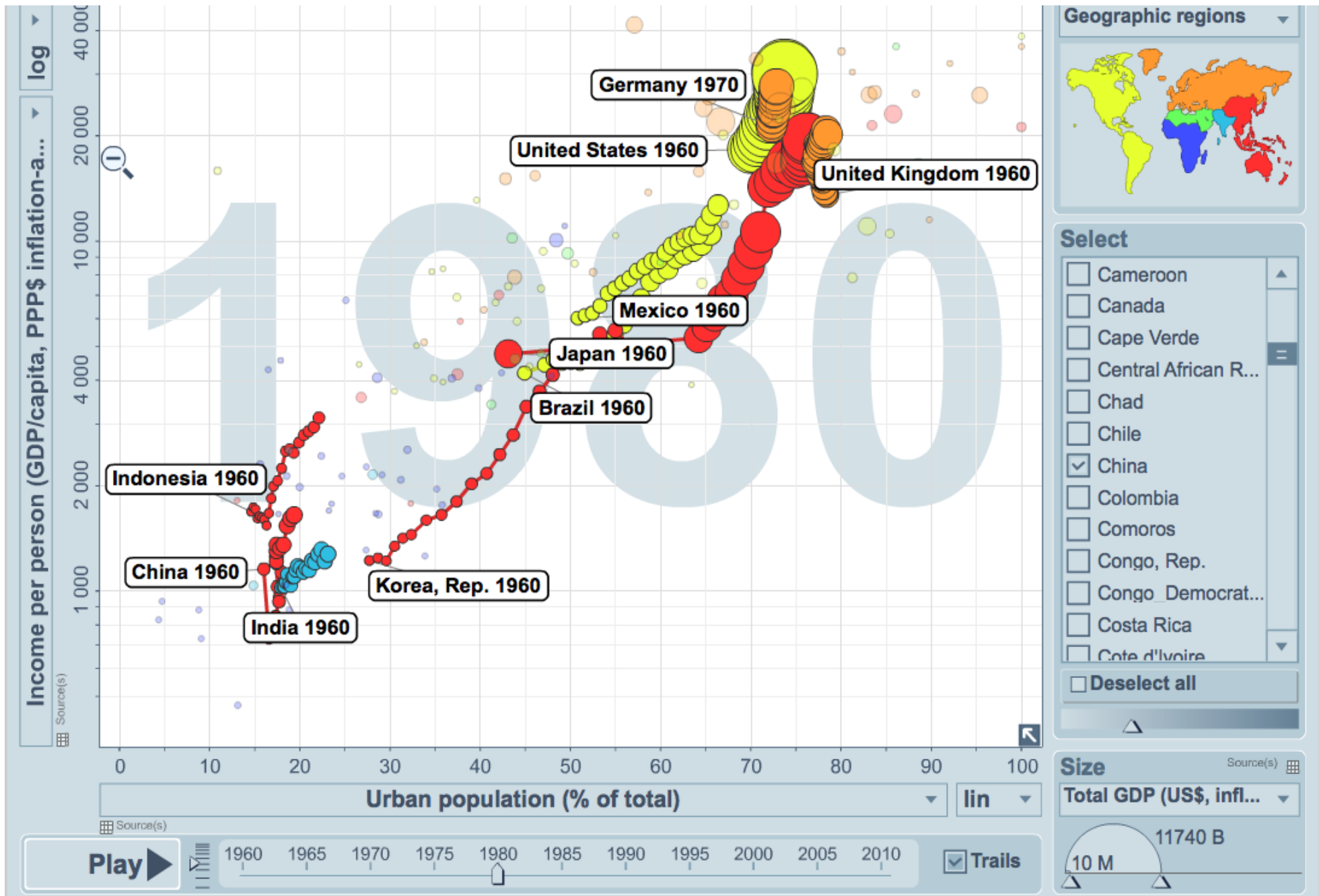
# Rural/ urban development – some key variables



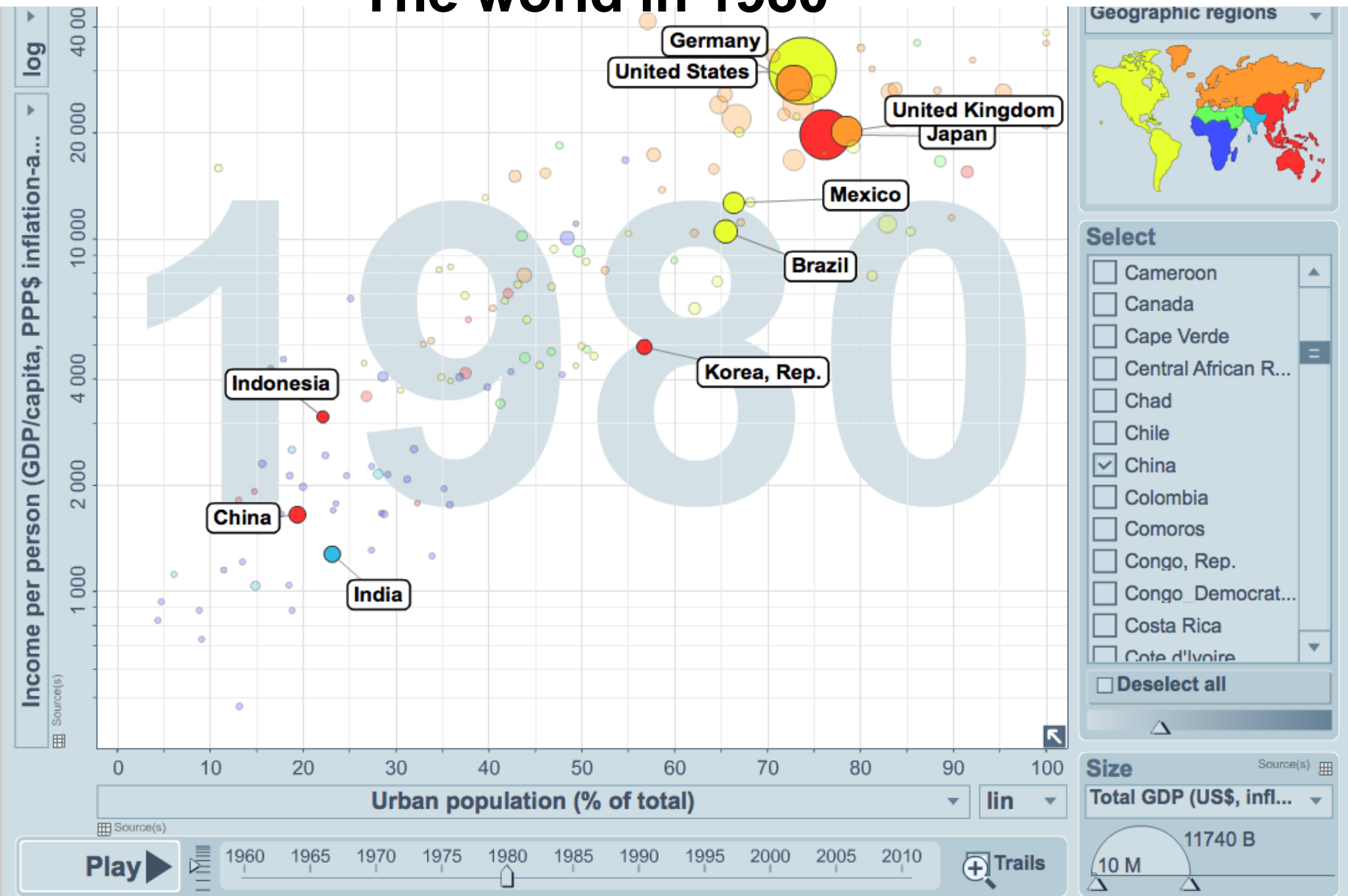
# The world in 1960



# 1960 – 1980 Japan/Korea and Brazilian miracle

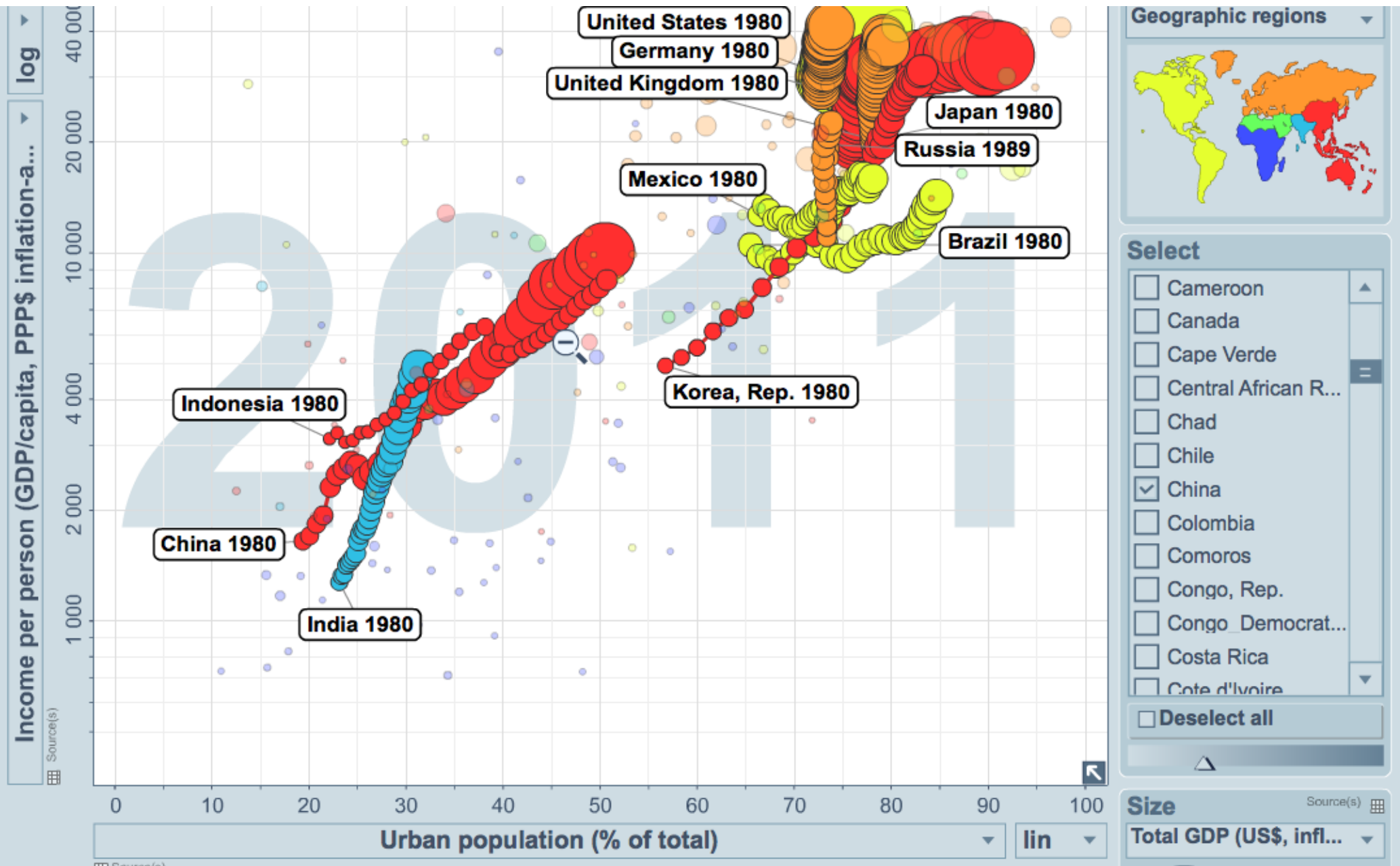


# The world in 1980

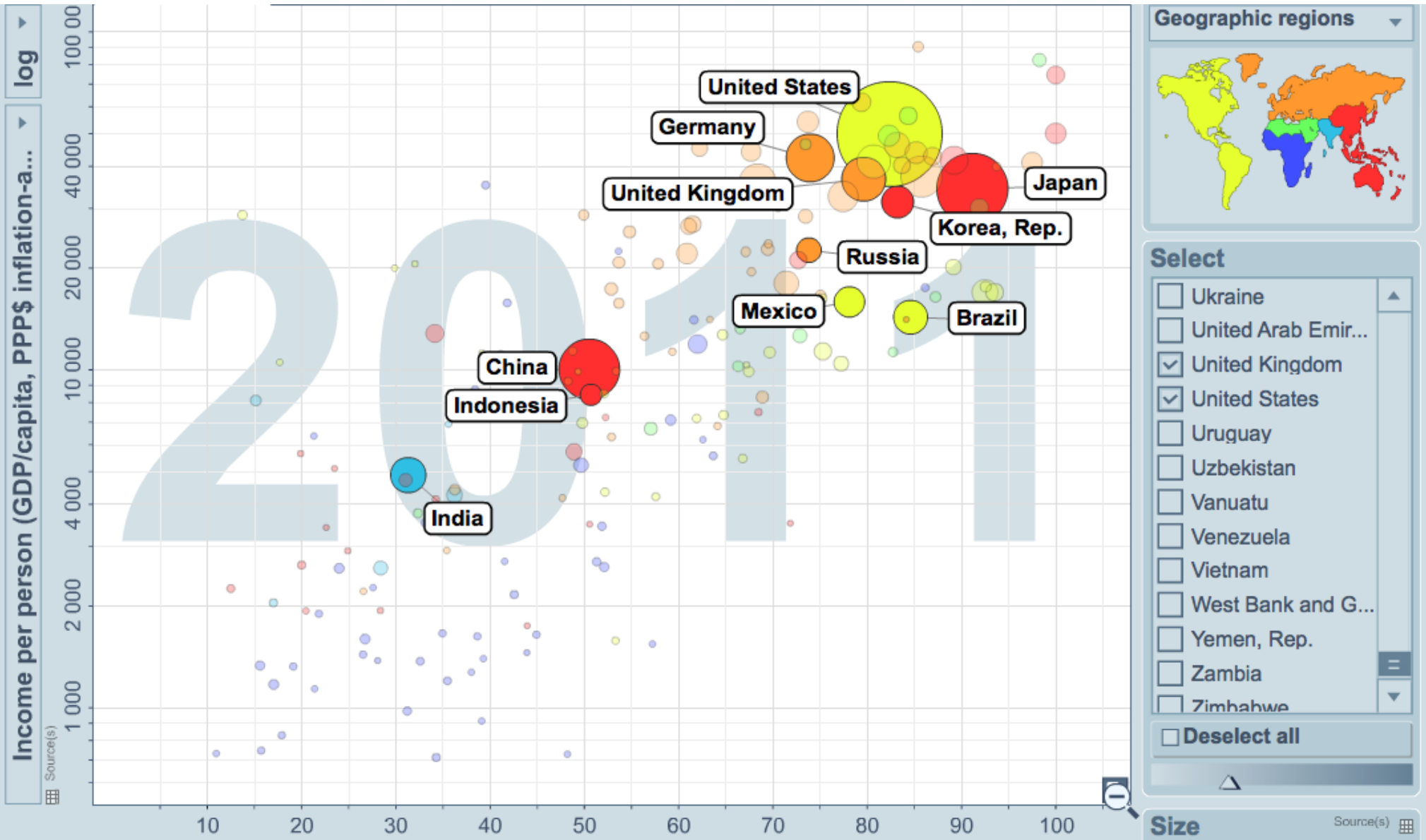




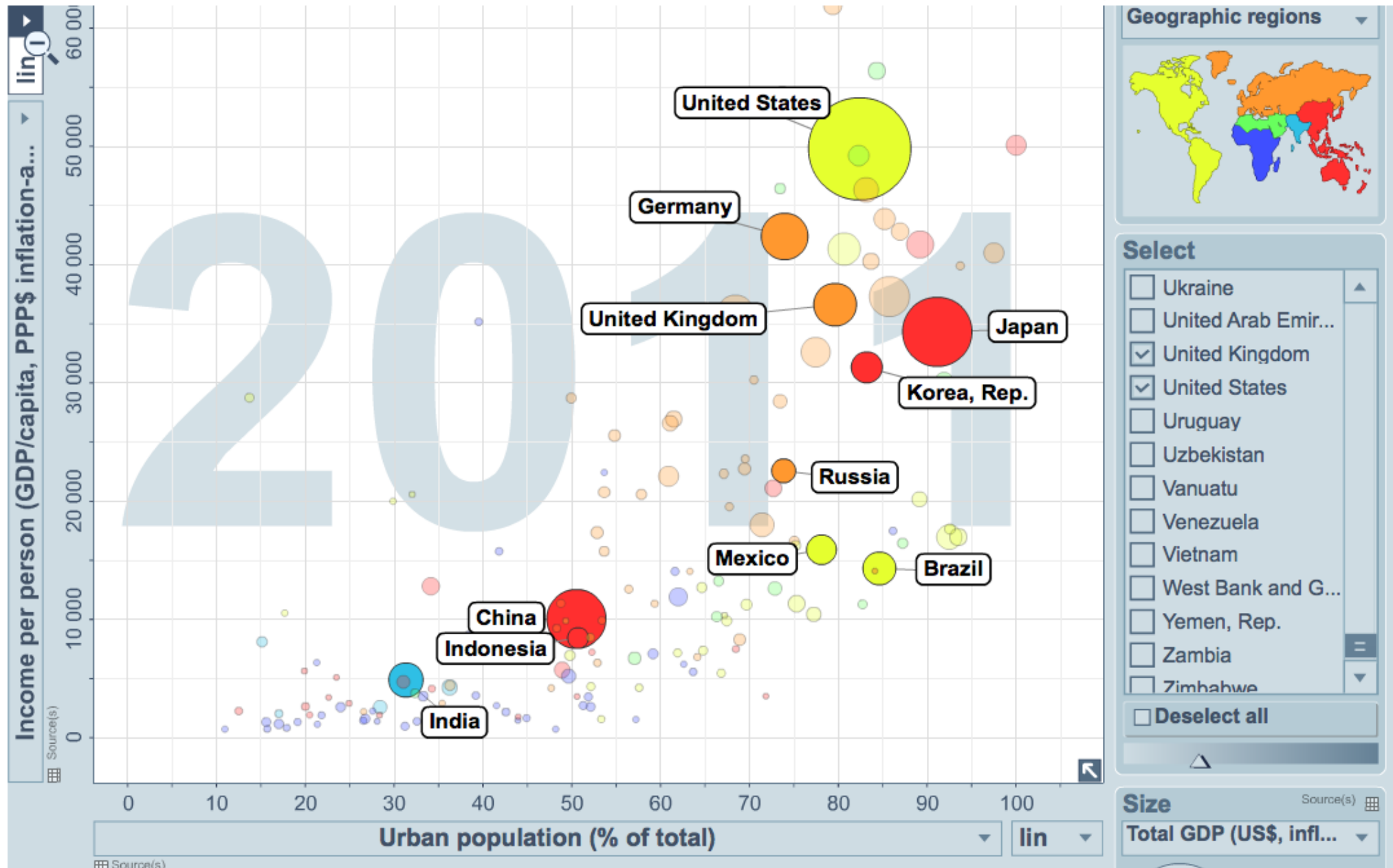
# 1980 – 2015 The rise of China



# The world today



# The world today – still a way to go



# Changing landscape



Jan 14th 2016



Jan 9th 2016



Jan 2nd 2016



Nov 19, 2016



Jan 17th 2017



Jan 21, 2017

## Emerging Markets at a turning point

### Past 25 years

- ▶ Fast rise of China
- ▶ Collapse of USSR
- ▶ A poor rural EM world
- ▶ Too many young
- ▶ Green Revolution
- ▶ Securing oil

### Next decades

- ▶ Uncertain China
- ▶ Steady rise of India/Africa
- ▶ An aspiring urban EM world
- ▶ Too many old
- ▶ Scramble for food
- ▶ End of oil/ biofuels



# Overview

## Key figures

GDP 2010: \$5.9trn



Population  
1.34bn

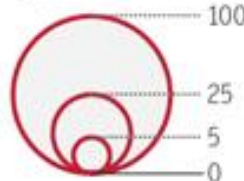
GDP per person,  
2010: \$4,400  
Average annual  
growth rate,  
1992-2010: 10.3%

Government spending  
As % of GDP, 2010: 22.7%  
Exchange rates  
June 14th 2011  
1 yuan = \$0.15  
(€0.11 £0.09)



## Population

By province, 2010, m



## GDP per person

By province, 2010, \$



Source: CEIC \*Autonomous regions †Province-level municipalities ‡Special administrative regions

500 km

# China's five year plan -- from land-driven to people-oriented urbanization



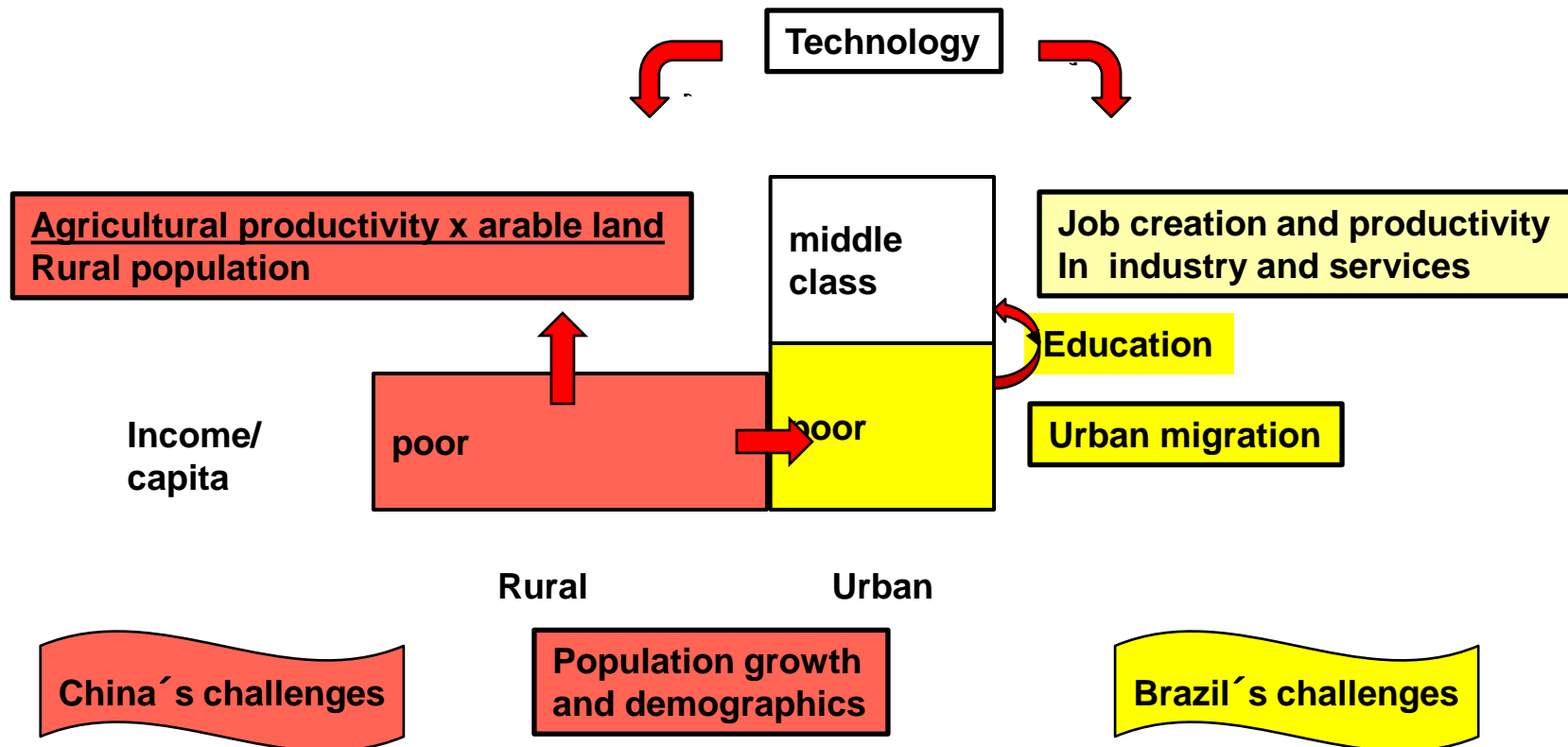
	Key Priority
Leaving from the rural farmland	Transferring the land-use right
Migrating into the urban city	Integrated into the basic public services  Reform on the <i>Hukou</i> (household registration) system
Prospect	Flow from the rural to the urban area, and vice versa

## Connecting inland China

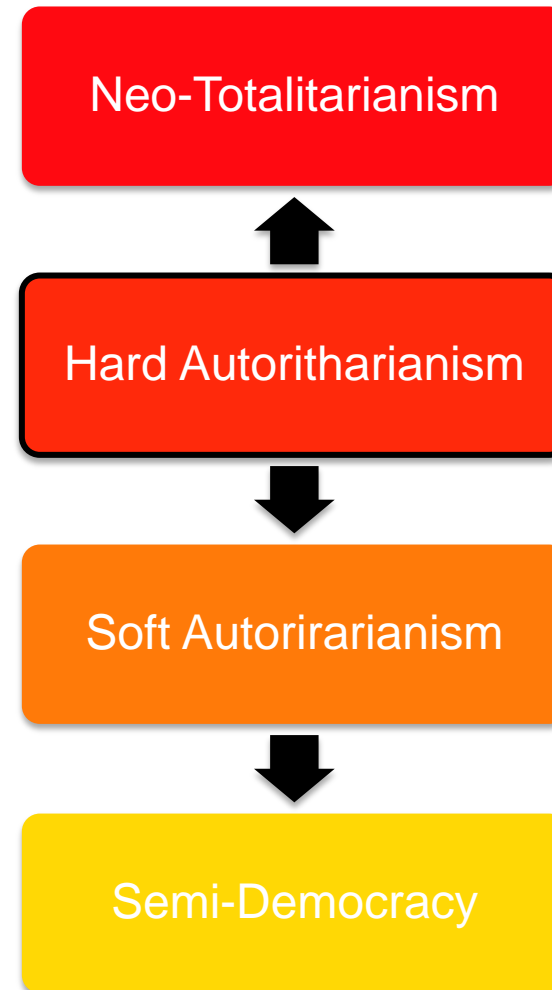
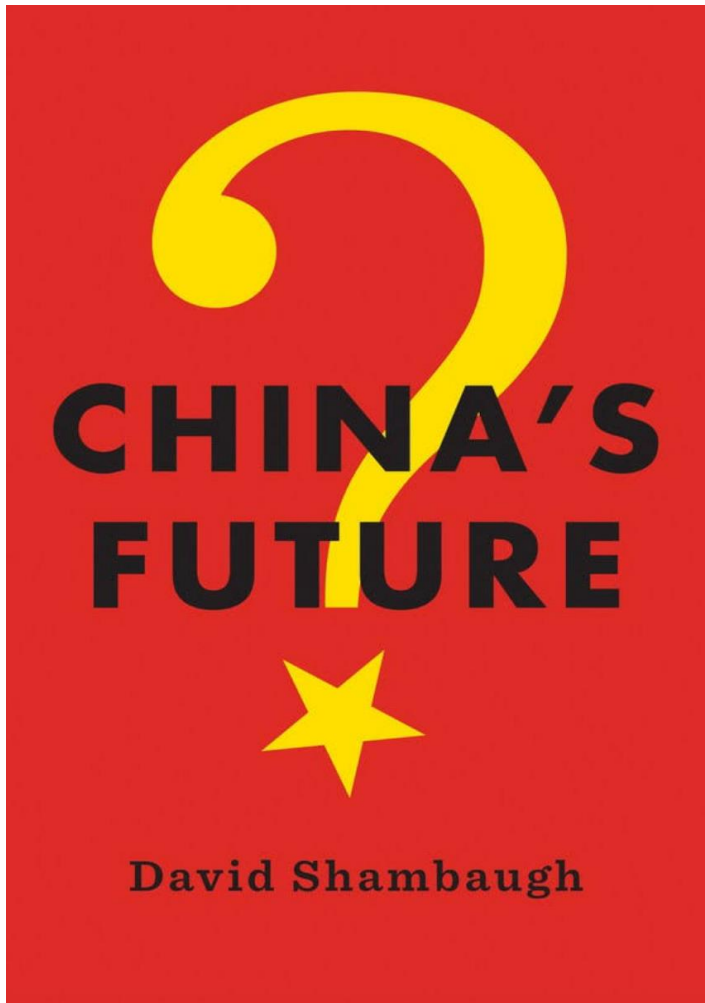




# China vs. Brazil models and challenges



## Possible pathways to China's Future





The uncertain future of democracy

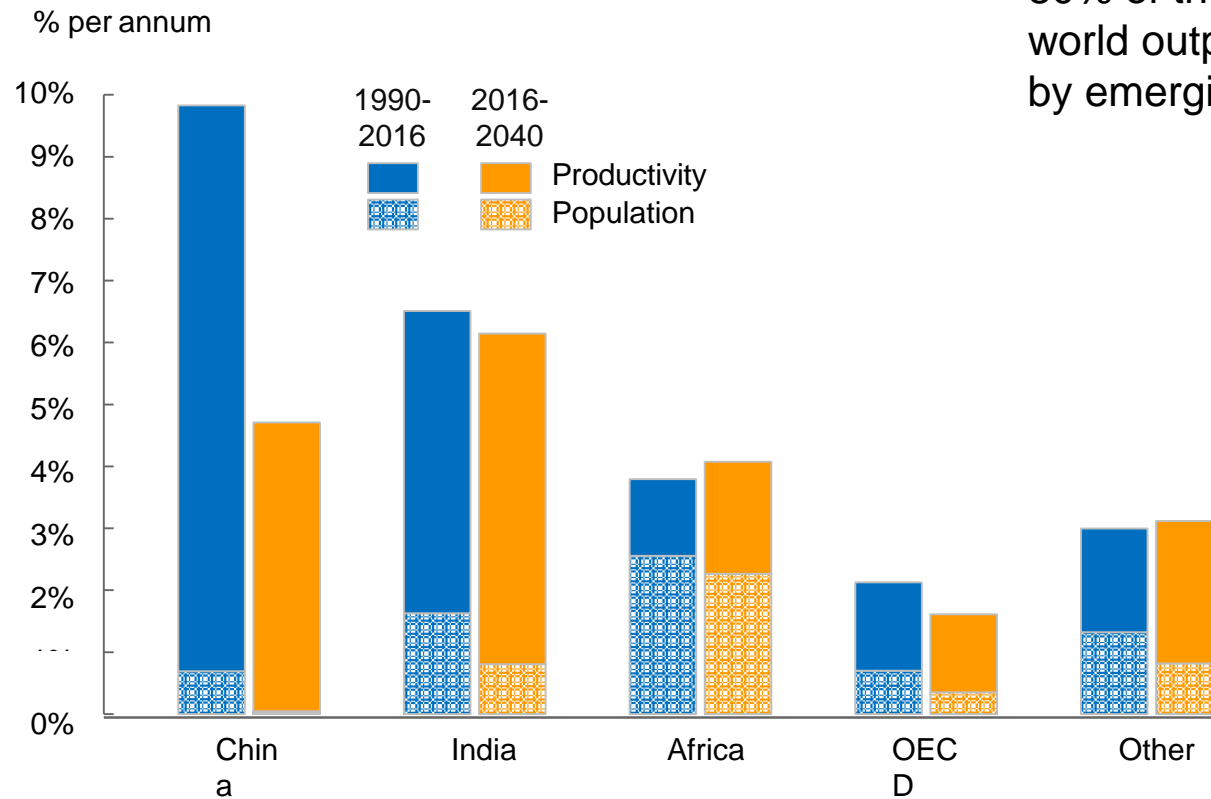
**The West's grandest challenge could be preserving the post-war stability that has existed for more than half a century.**

# The changing landscape

GDP is projected to grow at a similar rate to past 25 years...

At 3.25% pa growth, total output of the world will more than double by 2040

## GDP growth by region and factor



- 80% of the expansion in world output will be driven by emerging economies

## Emerging Markets at a turning point

### Past 25 years

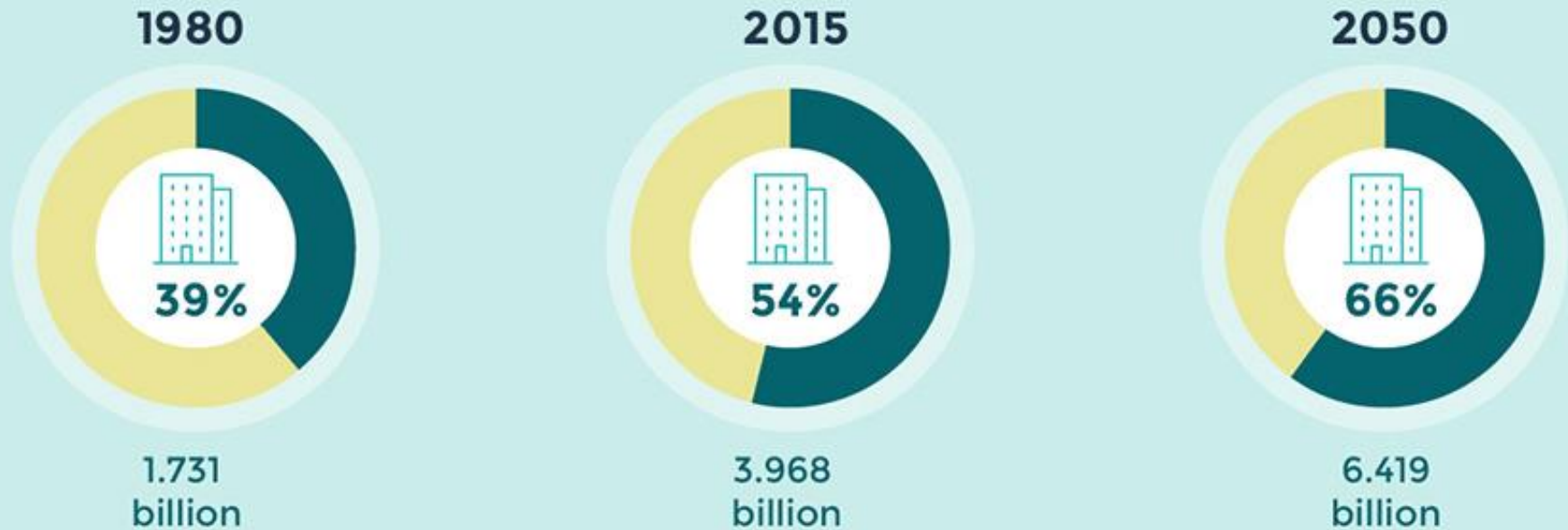
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### Next decades

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- ▶ **An aspiring urban EM world**
- ▶ Too many old
- ▶ Scramble for food
- ▶ End of oil/ biofuels

**The world will be increasingly urban – 2.5 billion more**

## Share of the Urban Population Worldwide



Source: United Nations, Department of Economic and Social Affairs, Population Division (2014).  
World Urbanization Prospects: The 2014 Revision, custom data acquired via website

# AN URBAN WORLD

This graphic depicts countries and territories with 2050 urban populations exceeding 100,000. Circles are scaled in proportion to urban population size. Hover over a country to see how urban it is (percentage of people living in cities and towns) and the size of its urban population (in millions).

## Urban Population

- Greater than 75%
- 50% - 75%
- 25% - 50%
- Less than 25%

1960



Notes

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1980



Notes



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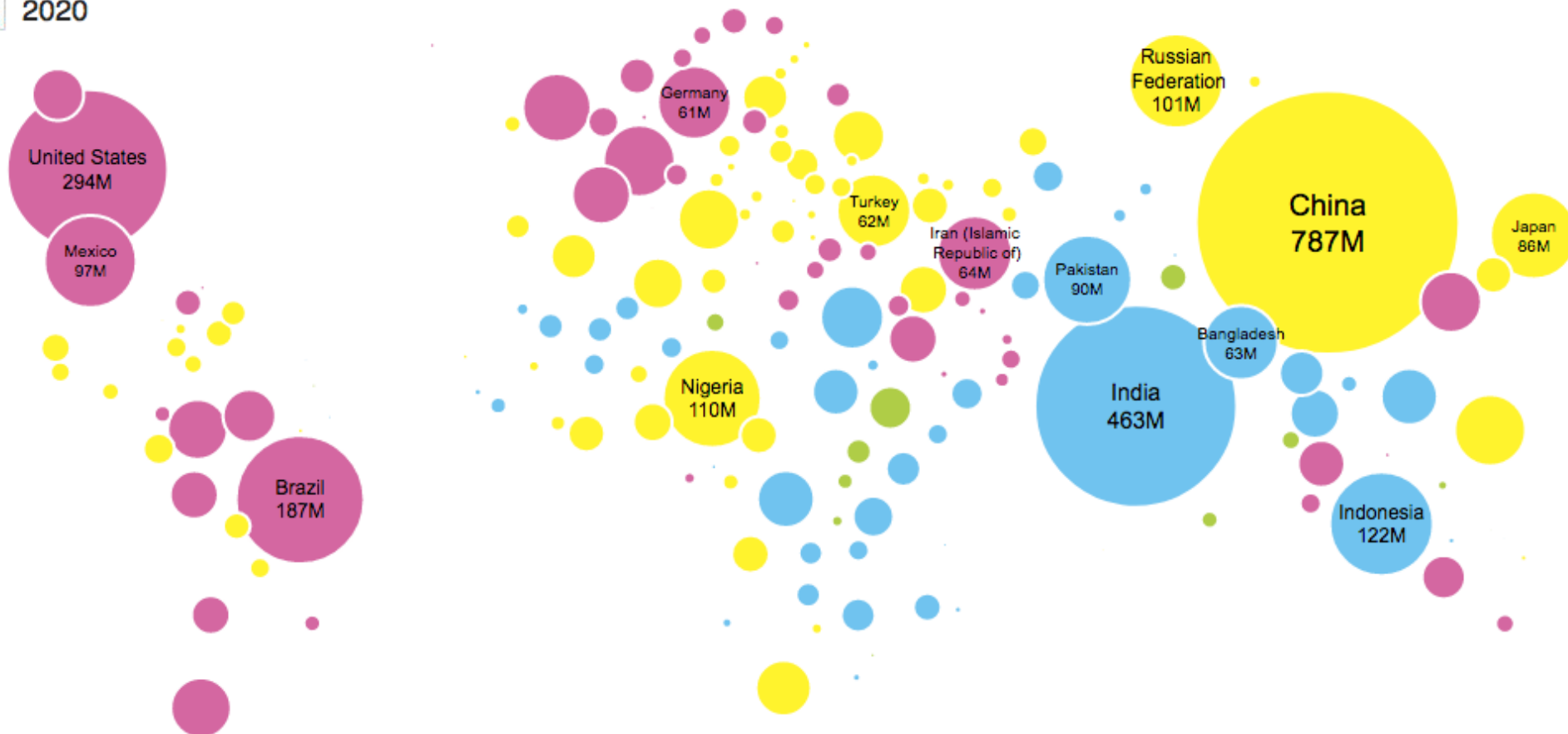
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2020



Notes



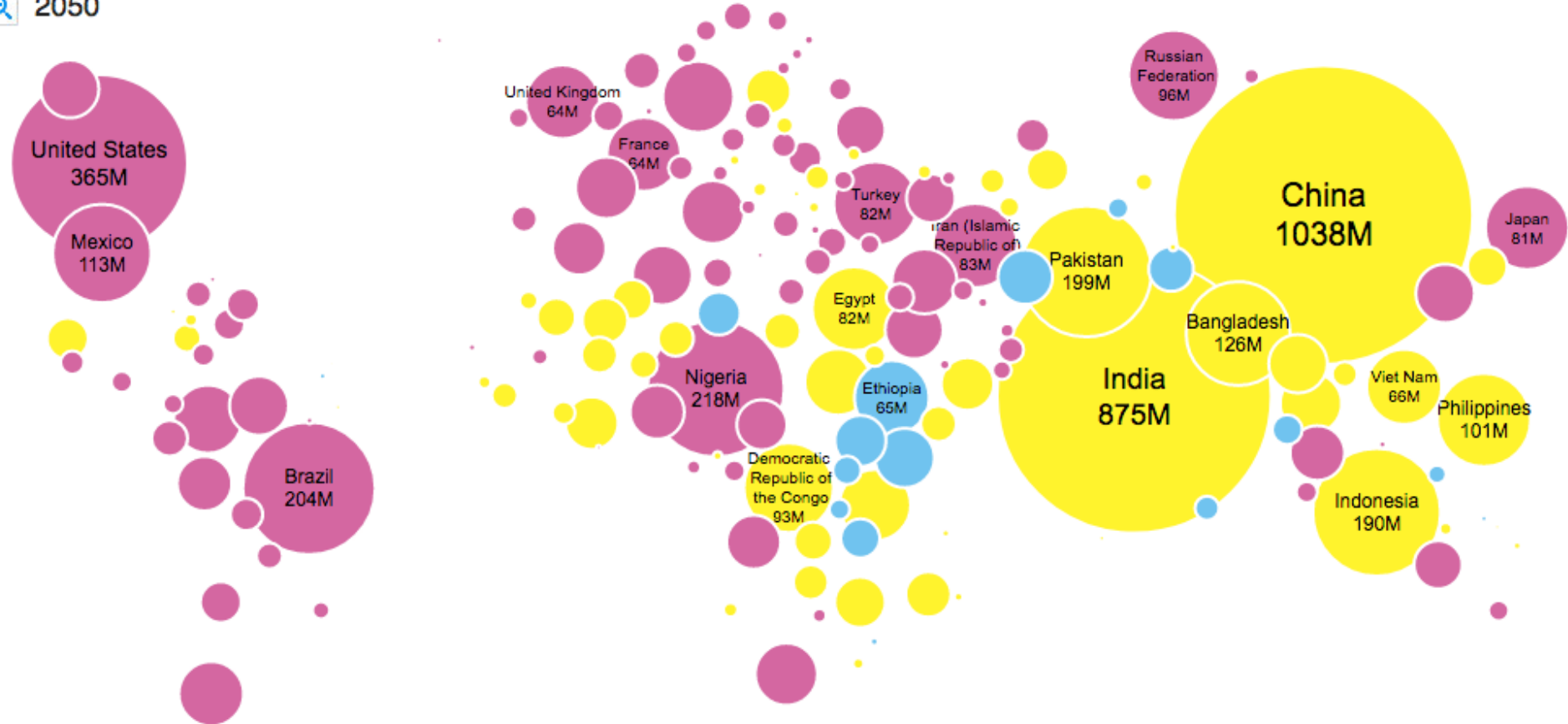
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2050

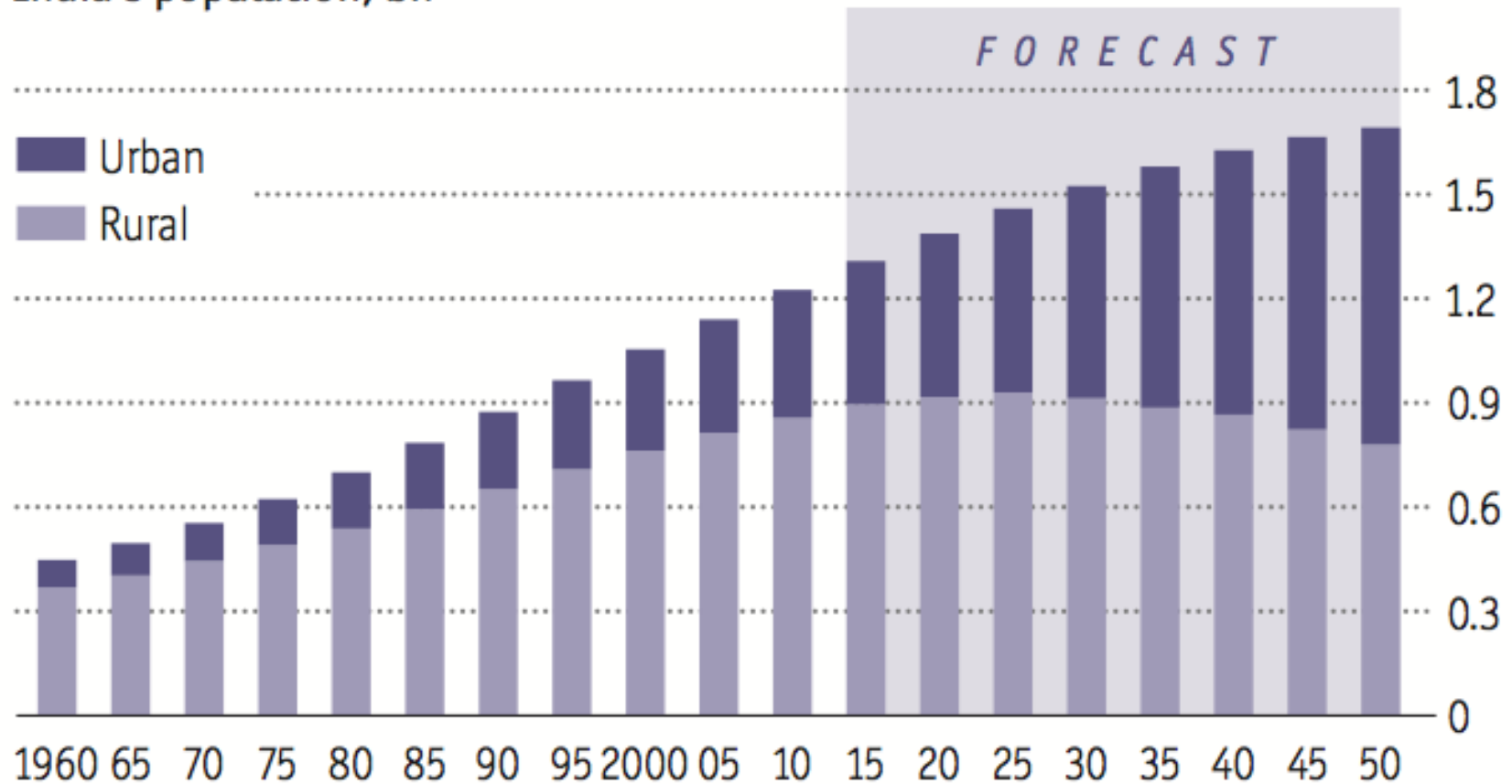


PROJECTED

Notes

## India's urbanization challenge – good or bad for development?

India's population, bn



Sources: World Bank; UN Population Division

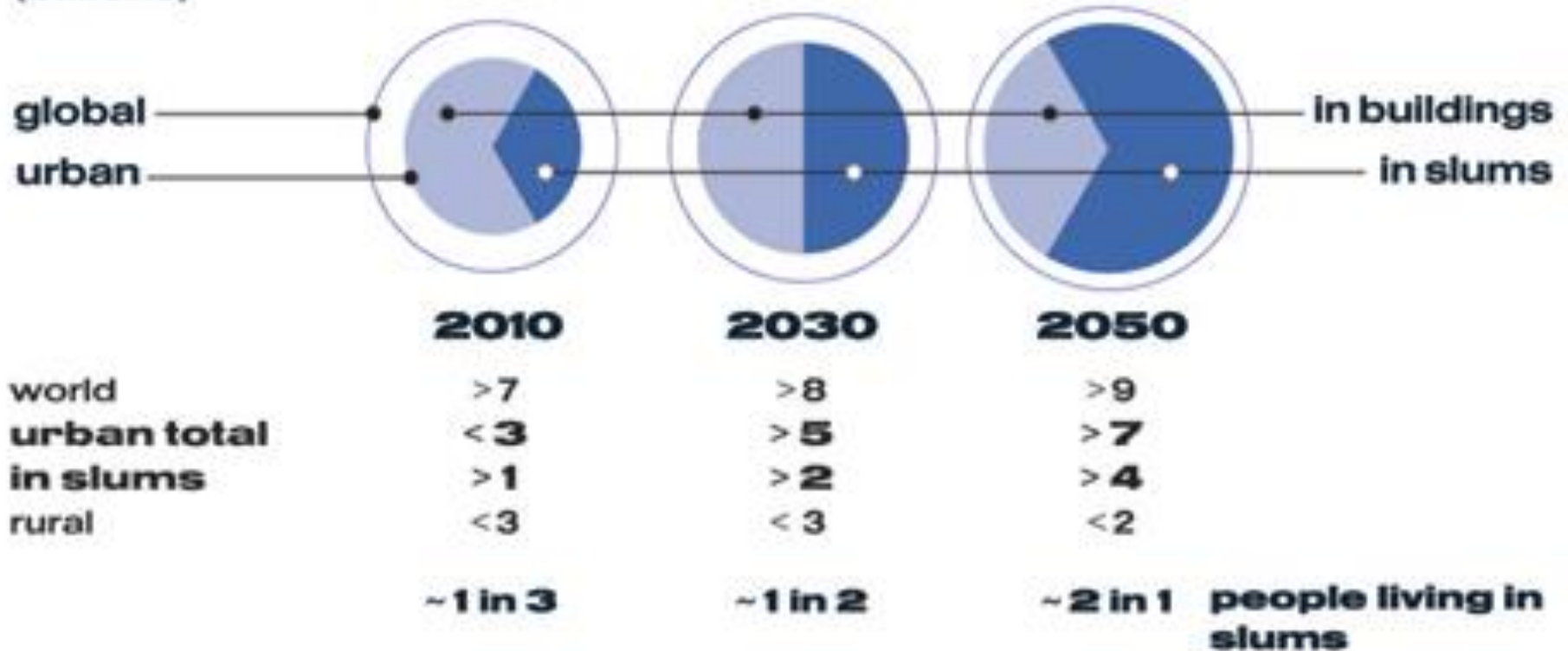


# A slum in Mumbai



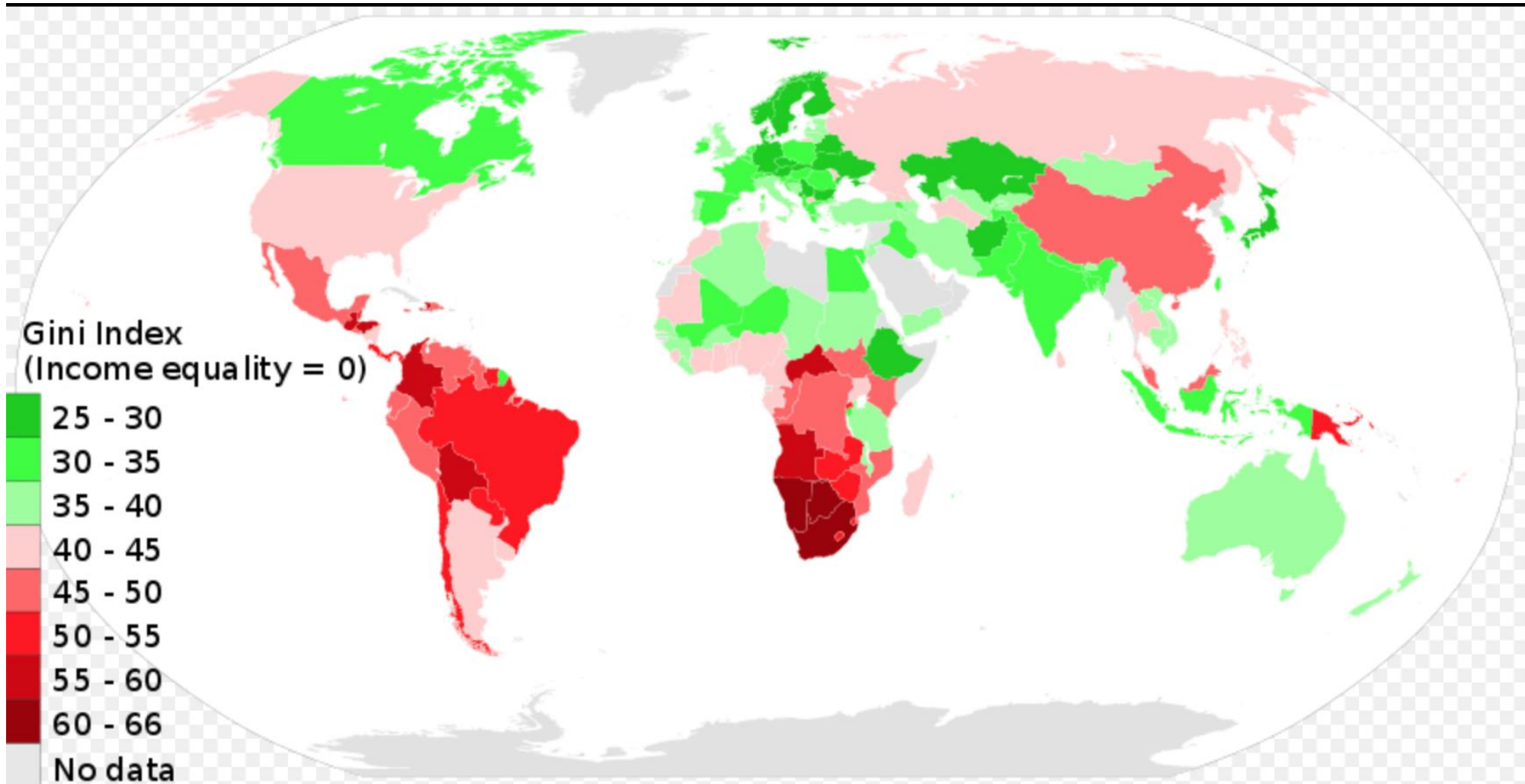
# The big challenge: urban poverty...

## World population (billions)





...coupled with income inequality



## Inequality and violence

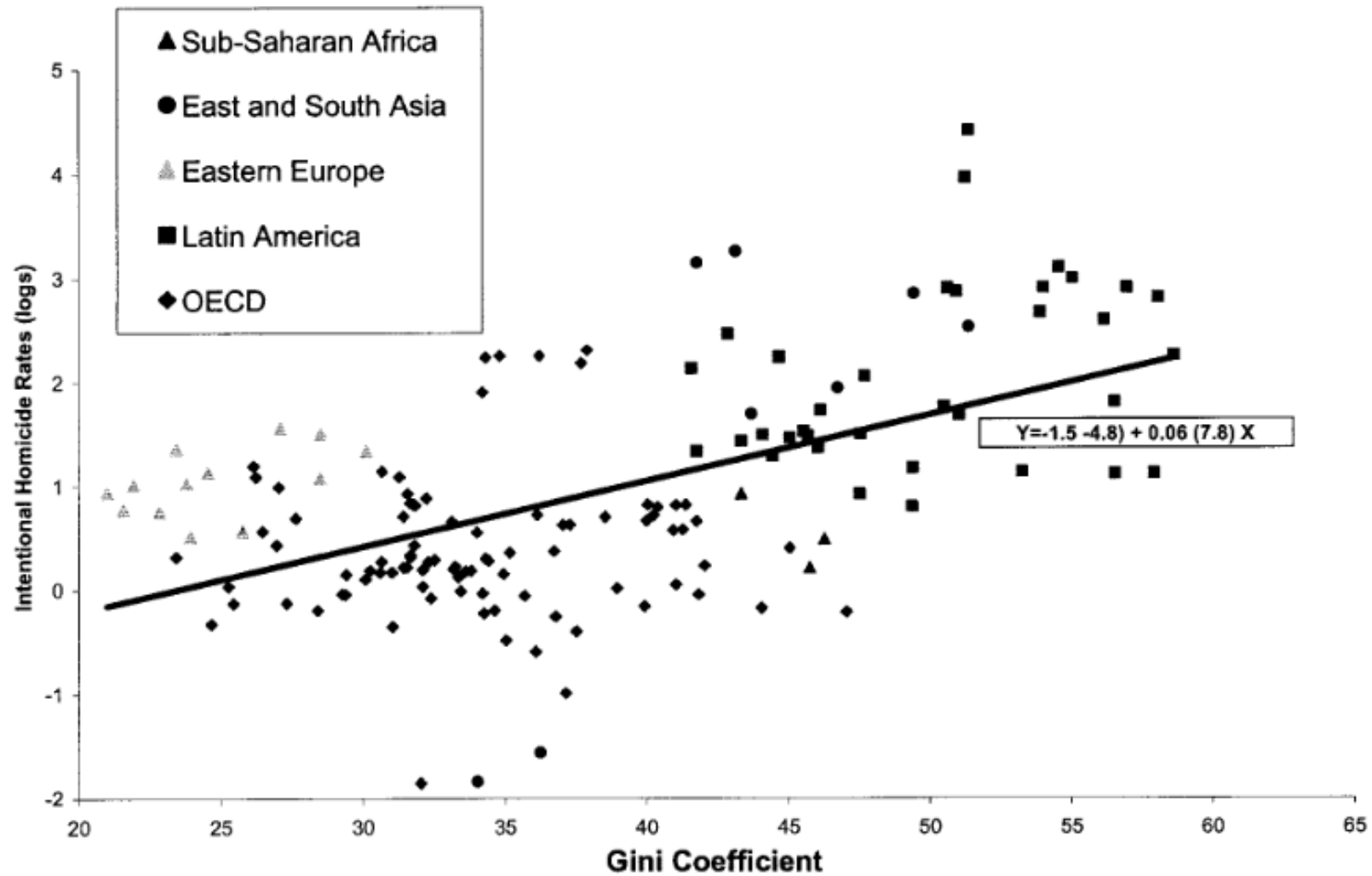


FIGURE 2.—Income distribution and robbery rates, 1970–94 (5-year averages)



## Emerging Markets at a turning point

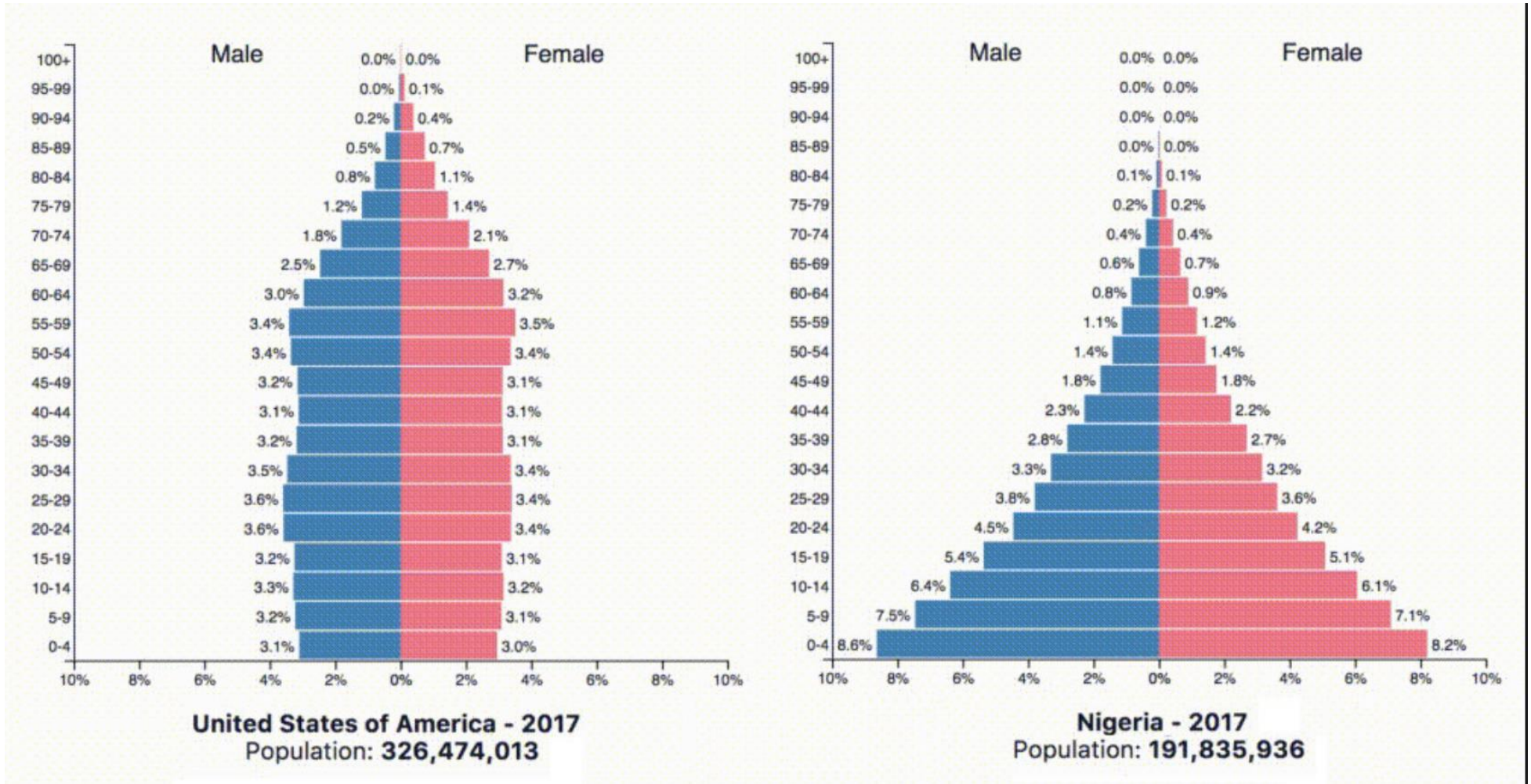
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# USA demographic pyramid vs. Nigeria's “youth bulge”



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# Youth Bulge: A Demographic Dividend or a Demographic Bomb in Developing Countries?

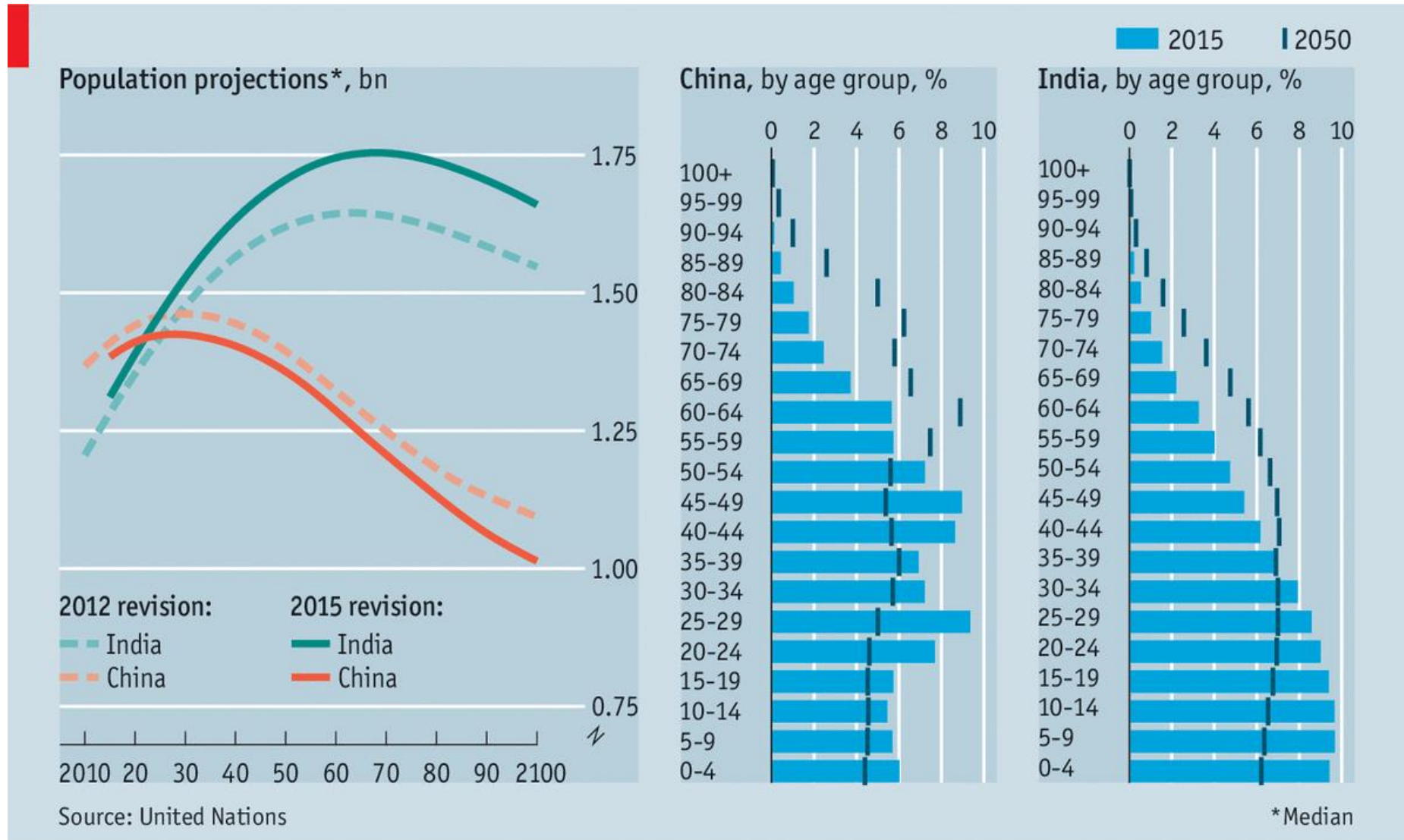


(/team/justin-yifu-lin)

SUBMITTED BY JUSTIN YIFU LIN (/TEAM/JUSTIN-YIFU-LIN) ON THU, 01/05/2012

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# Aging China vs. India's demographic dividend



# The burden of ageing

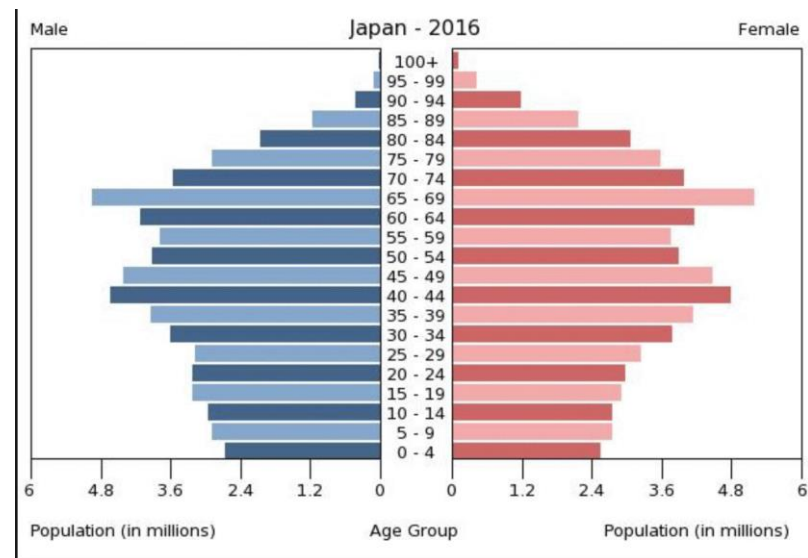
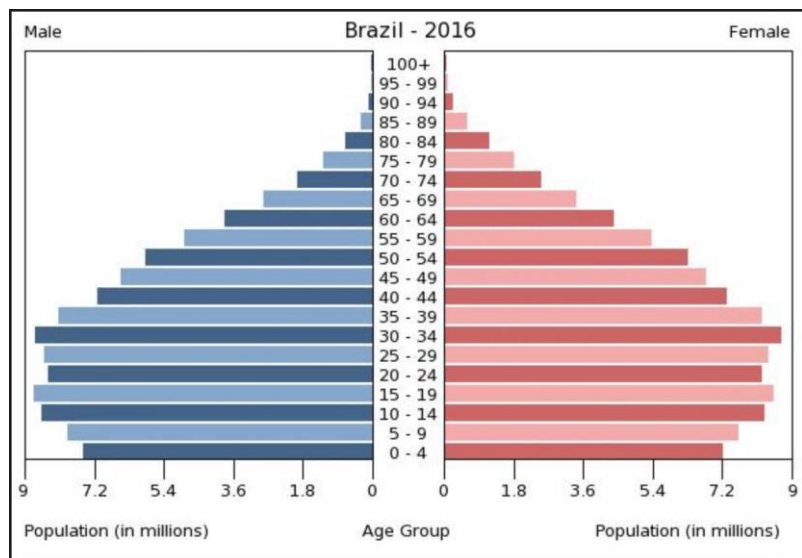
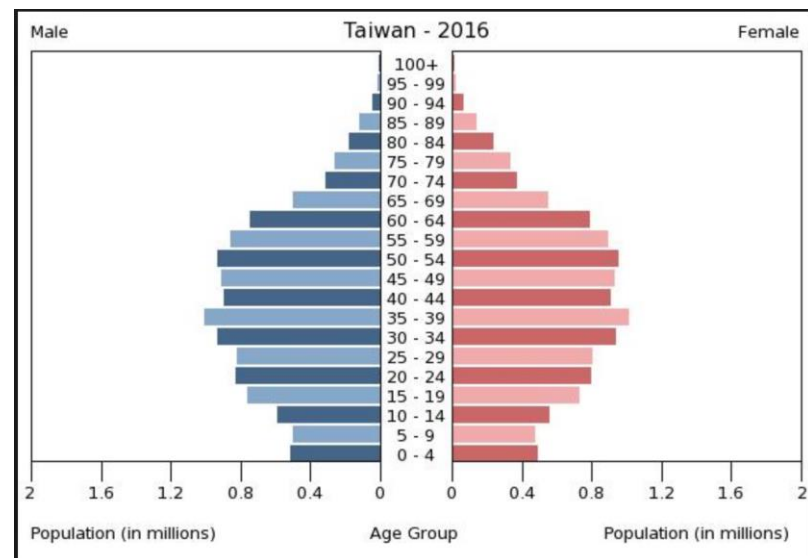
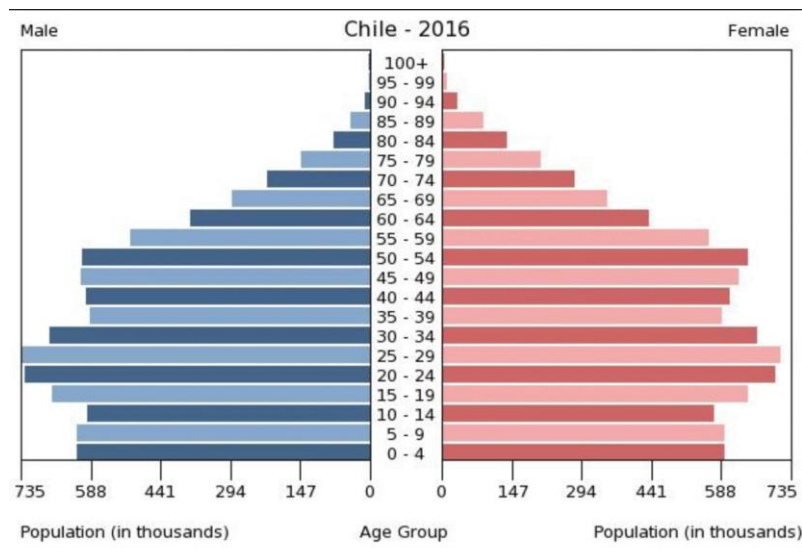
China's population by age group, m



Source: The Brookings Institution



# Living longer and having less children as countries develop



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Where will we  
find enough food  
for 9 billion?

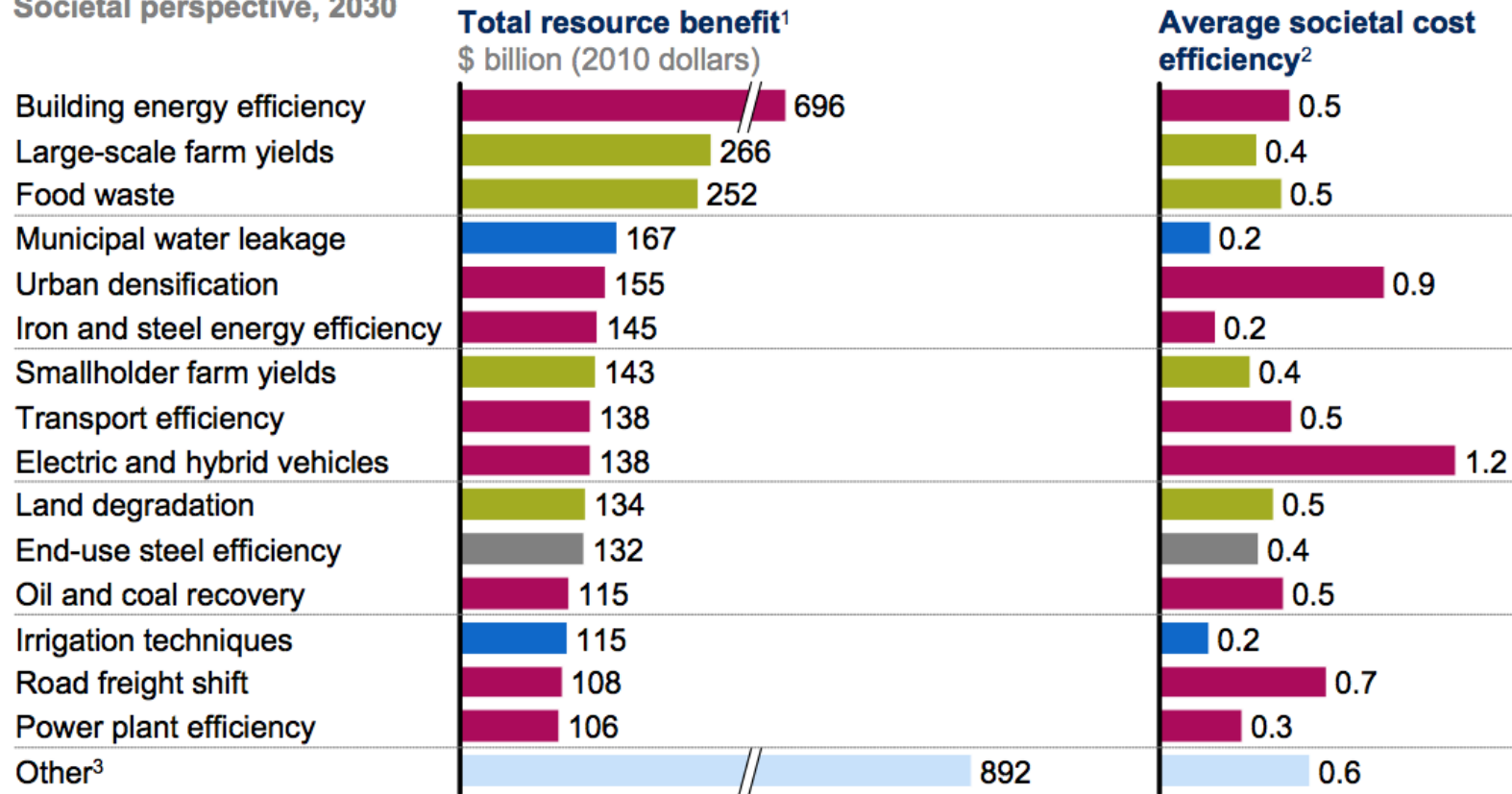


# Food is, after energy, the largest global resource challenge...

## Fifteen groups of opportunities represent 75 percent of the resource savings

Societal perspective, 2030

Energy Land  
Water Steel



1 Based on current prices for energy, steel, and food plus unsubsidized water prices and a shadow cost for carbon.

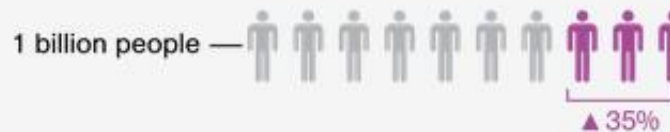
2 Annualized cost of implementation divided by annual total resource benefit.

3 Includes other opportunities such as feed efficiency, industrial water efficiency, air transport, municipal water, steel recycling, wastewater reuse, and other industrial energy efficiency.

SOURCE: McKinsey analysis

# A World Demanding More

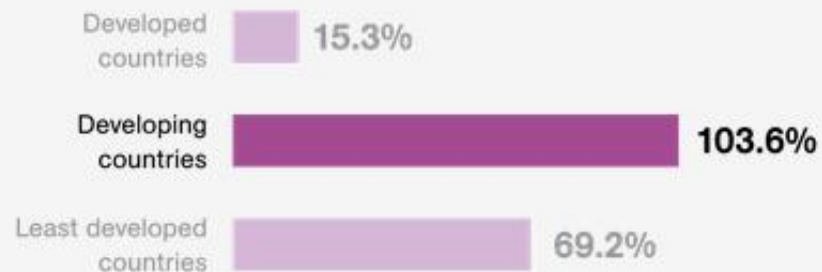
*By 2050 the world's population will likely increase by more than 35 percent.*



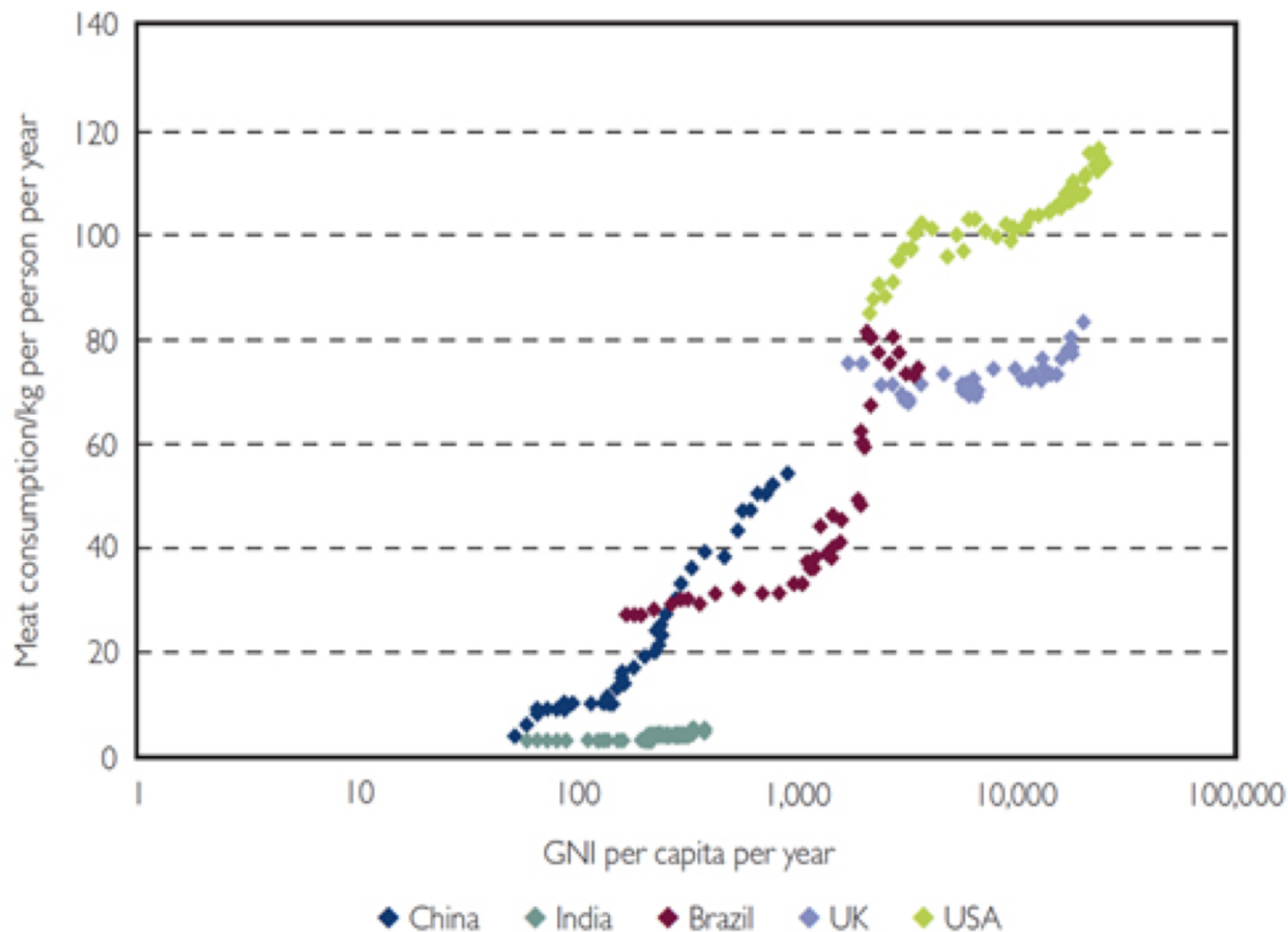
*To feed that population, crop production will need to double.*



*Why? Production will have to far outpace population growth as the developing world grows prosperous enough to eat more meat.*



**Figure 2. Changing consumption of meat in relationship to gross nation income in China, India, Brazil, UK and USA (1961 - 2007)**



Source: FAOSTAT; World Bank

Swine in China

# Empire of the pig

**China's insatiable appetite for pork is a symbol of the country's rise. It is also a danger to the world**

Dec 20th 2014 | LUXI COUNTY, JIANGXI | From the print edition





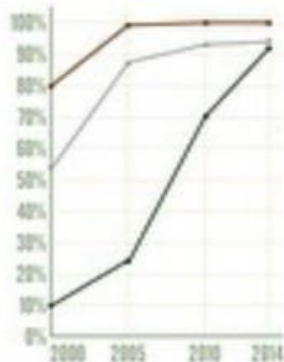
# SOYBEANS AND SOYBEAN MEAL

## Main Cultivation and Trade Flows

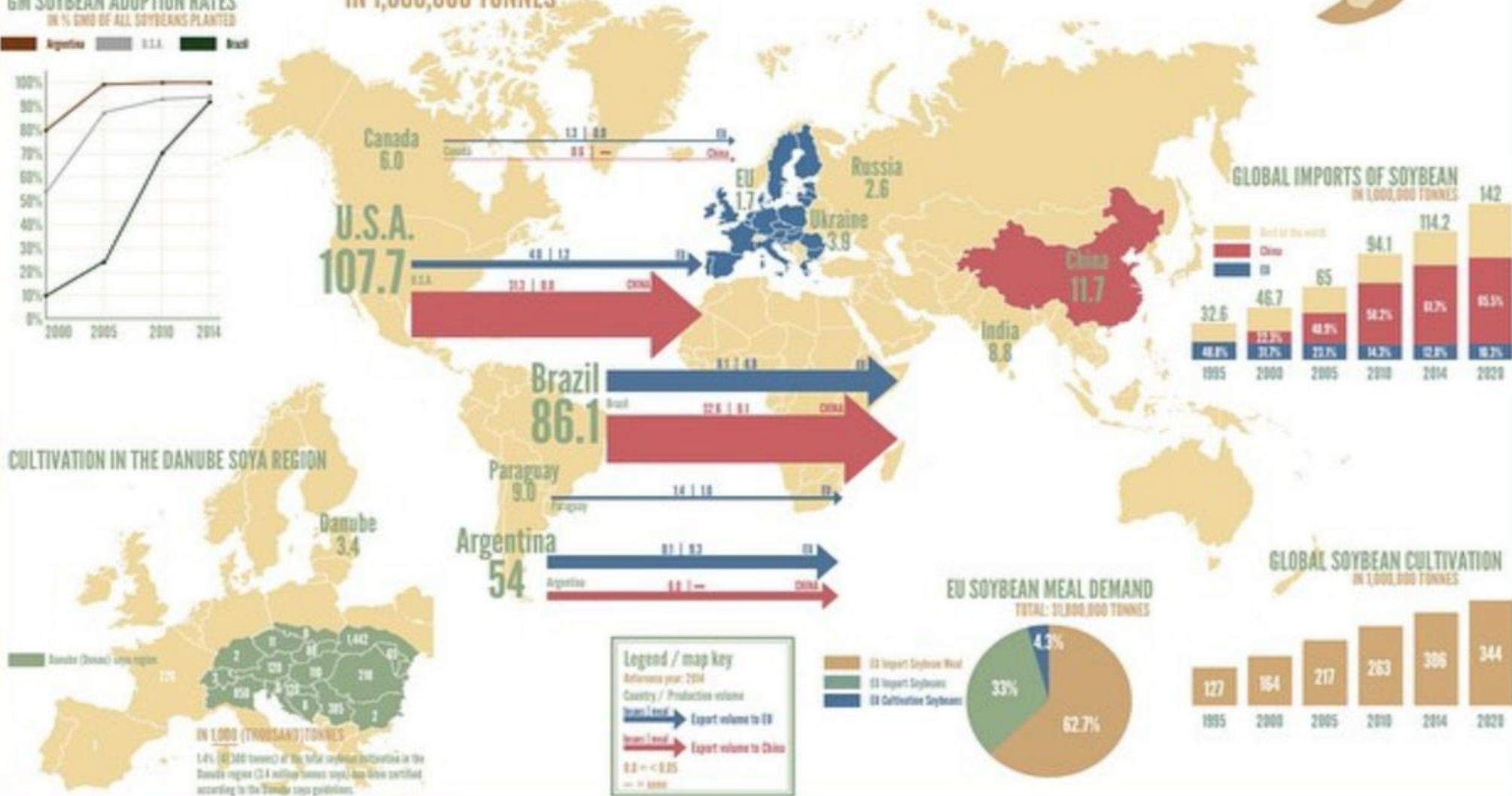


GM SOYBEAN ADOPTION RATES  
IN % GMD OF ALL SOYBEANS PLANTED

Argentina U.S.A. Brazil



IN 1,000,000 TONNES



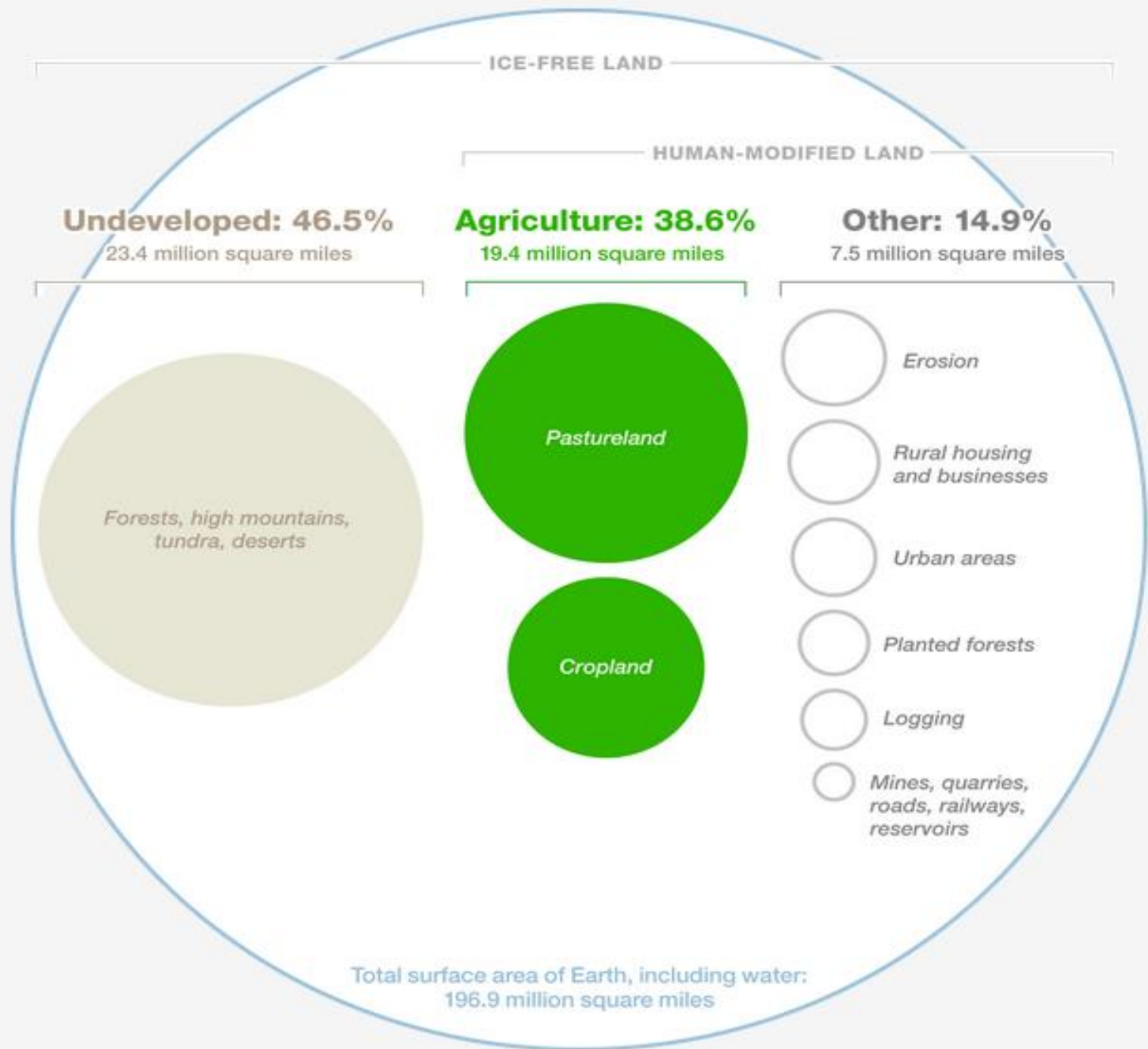
## OPINION

# US corn ethanol fuels food crisis in developing countries

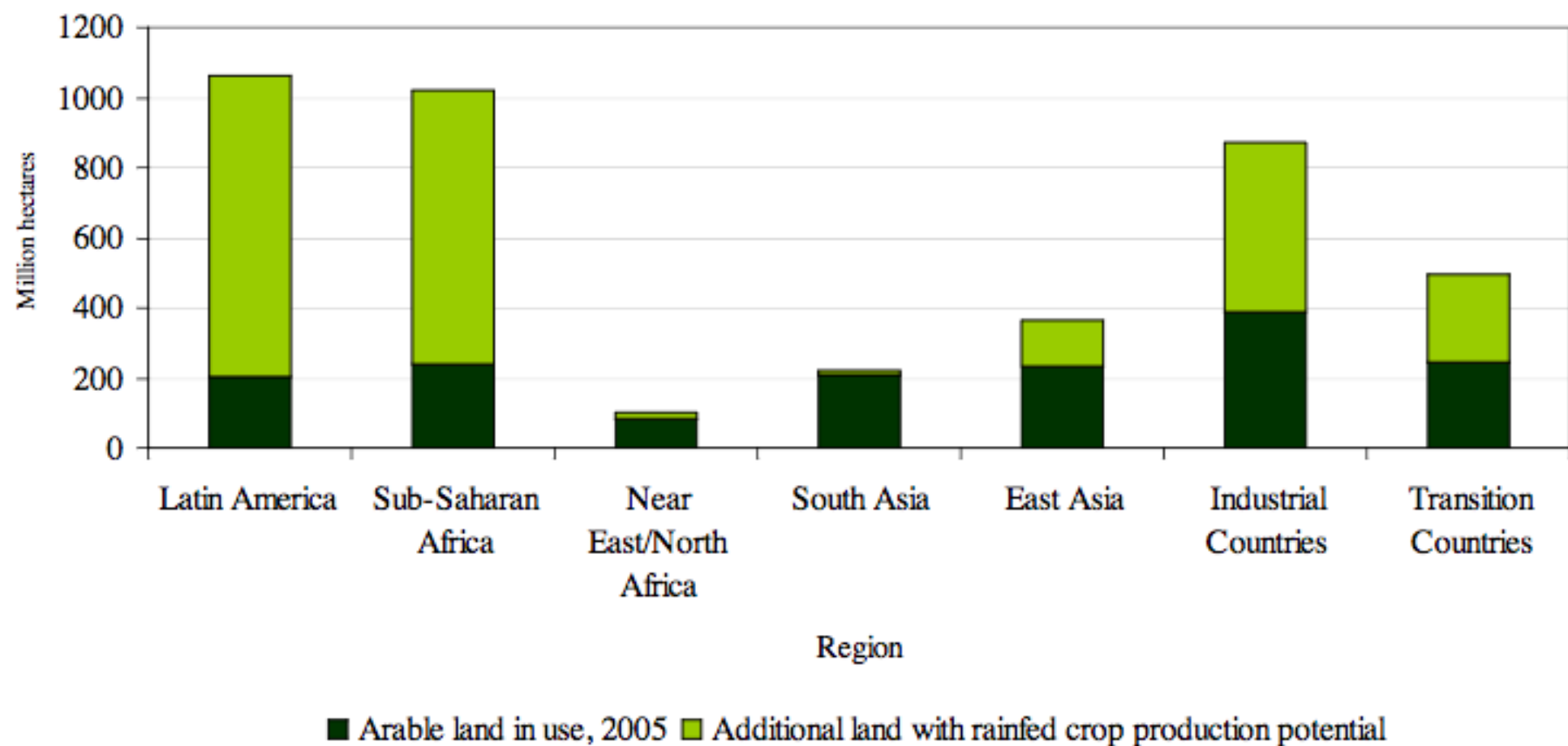
The US ethanol programme pushed up corn prices by up to 21 per cent as it expanded to consume 40 per cent of the harvest

10 Oct 2012 14:18 GMT





### Potential for Cropland Expansion?



Source: Bruinsma (2009).

## Available arable land

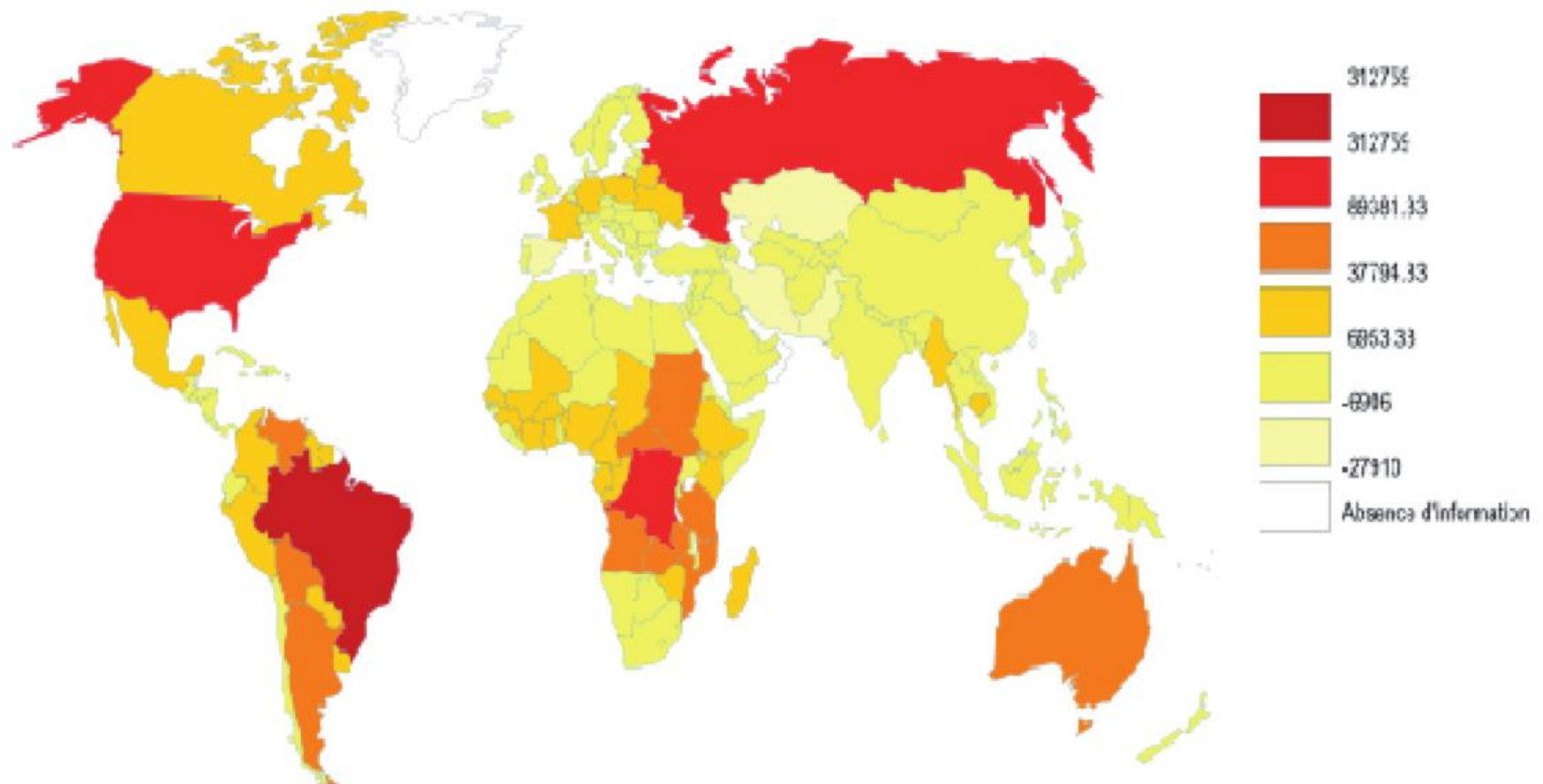
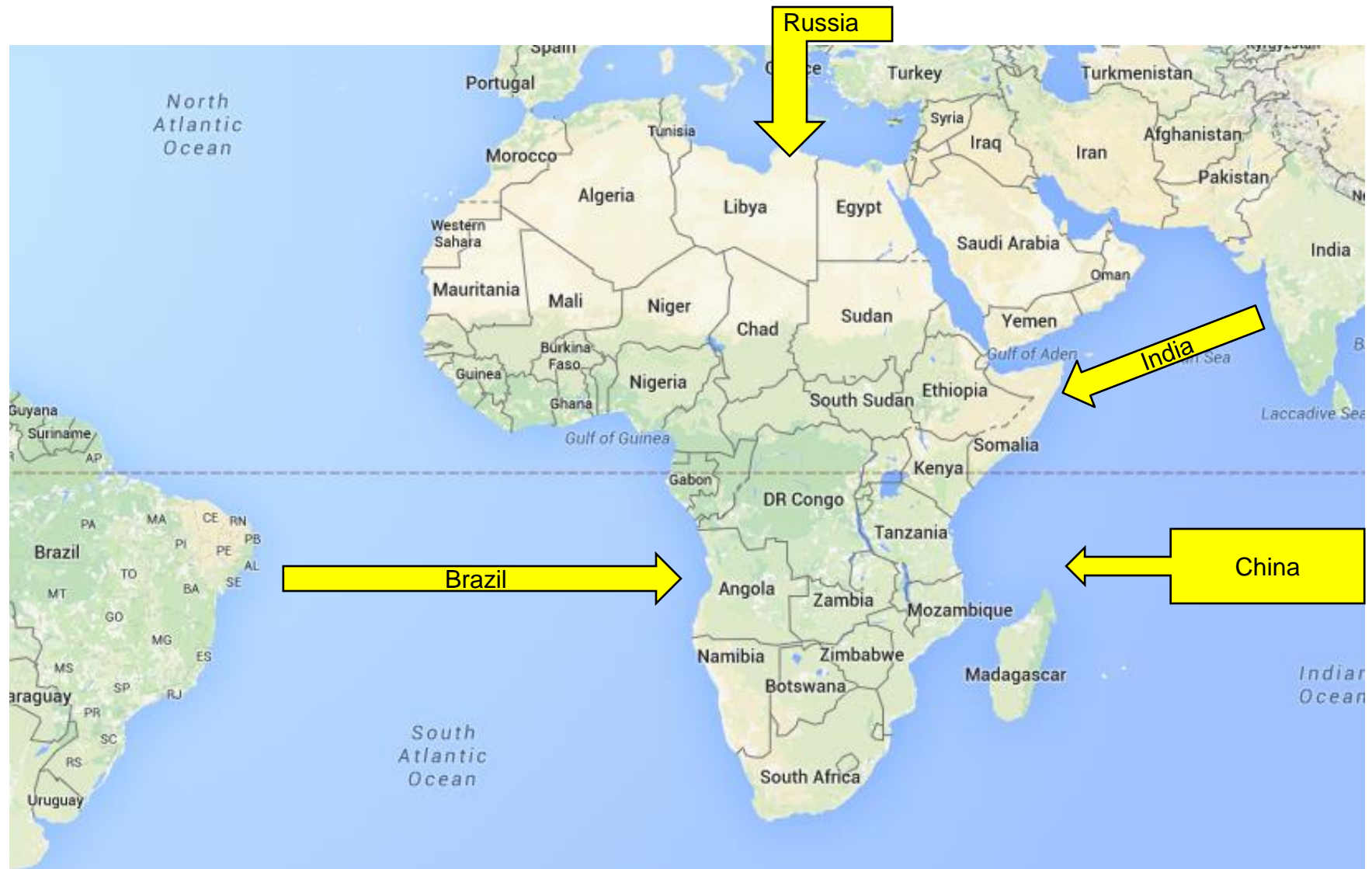


Figure 2. Surfaces with agricultural potential (very good, good or average) but not used for agriculture. In thousands of hectares per country. Made by AGTER from 2002 GAEZ / IIASA-FAO data. (map made using Philcarto)

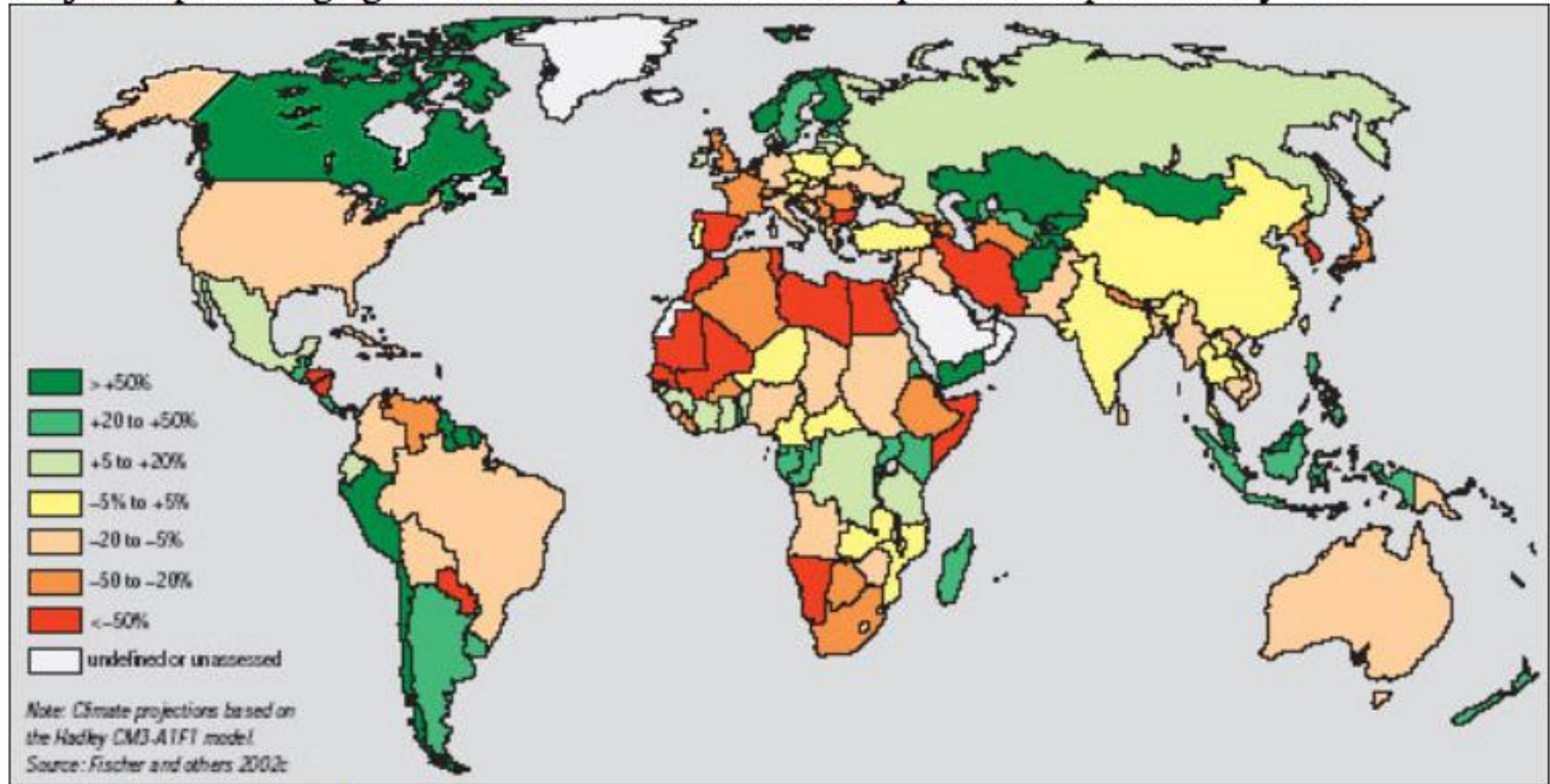
# All the BRICs are heavily involved in the African scramble





# Global warming impact -- may actually help

Projected percentage gain and losses in rainfed cereal production potential by 2080



Source: UNEP (2006)

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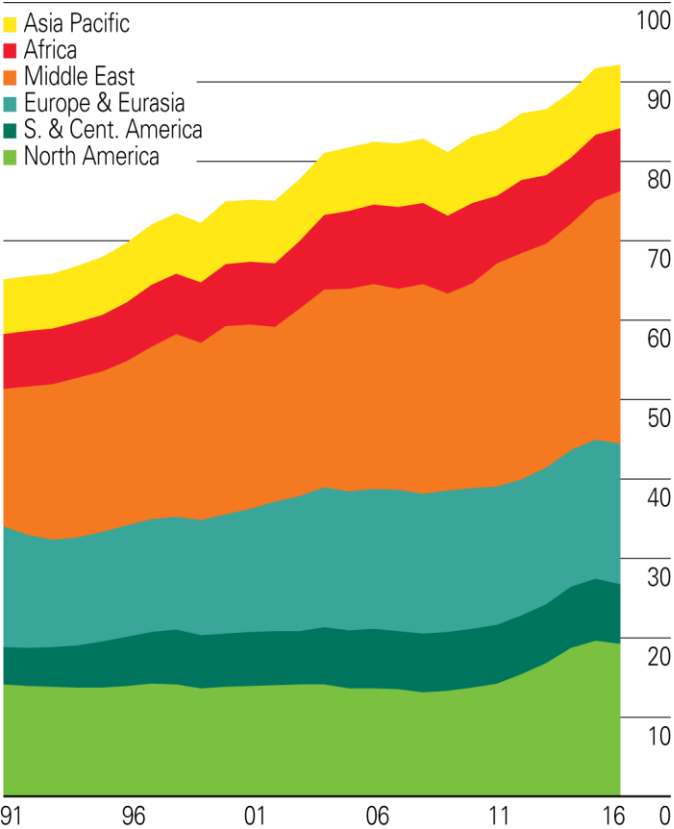
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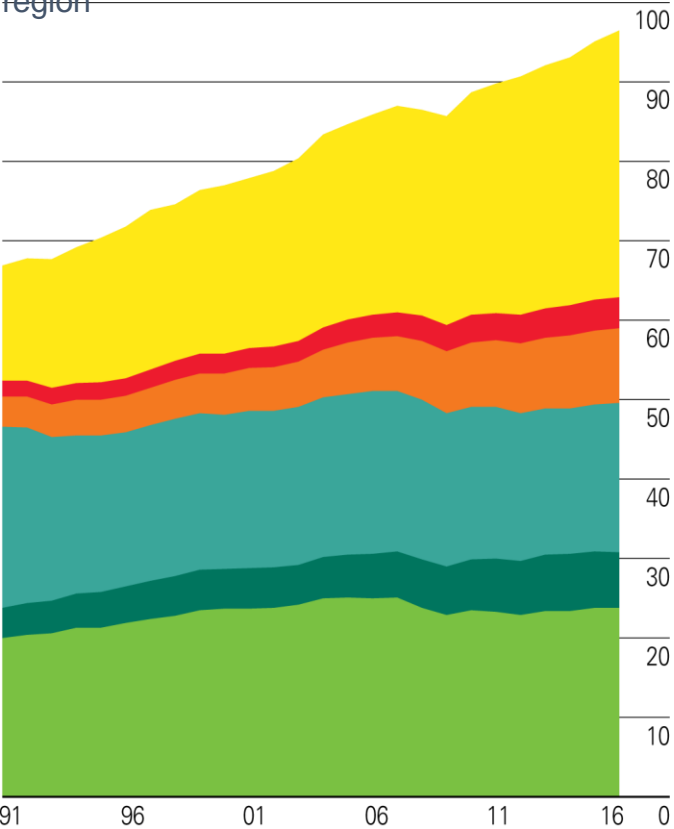
# Oil production/consumption by region

Million barrels daily

Production by region



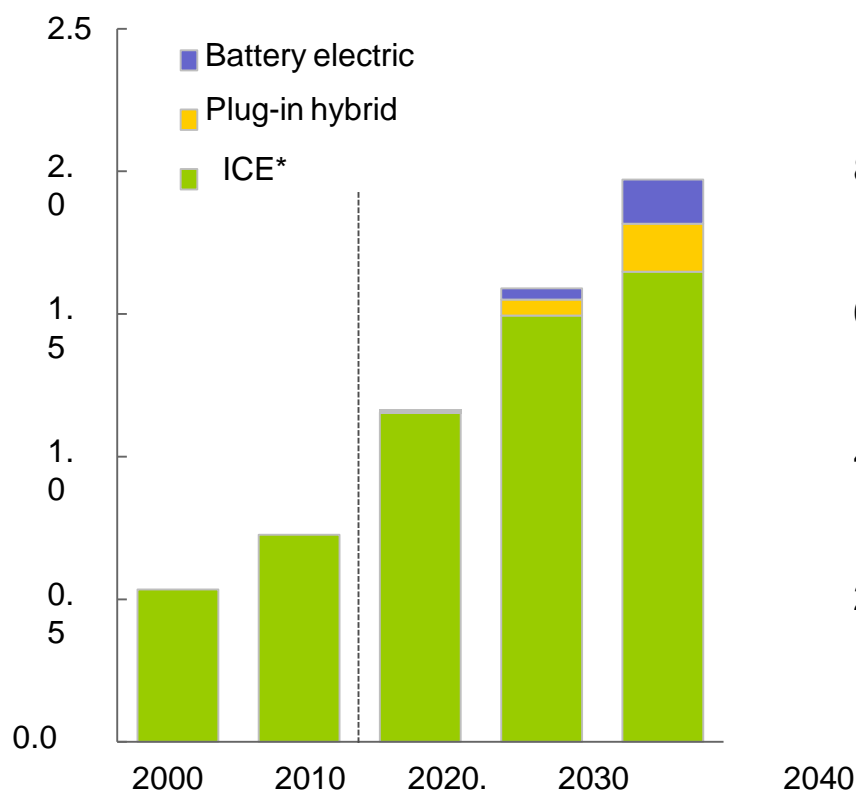
Consumption by region



# The passenger car parc grows substantially, but becomes more efficient...

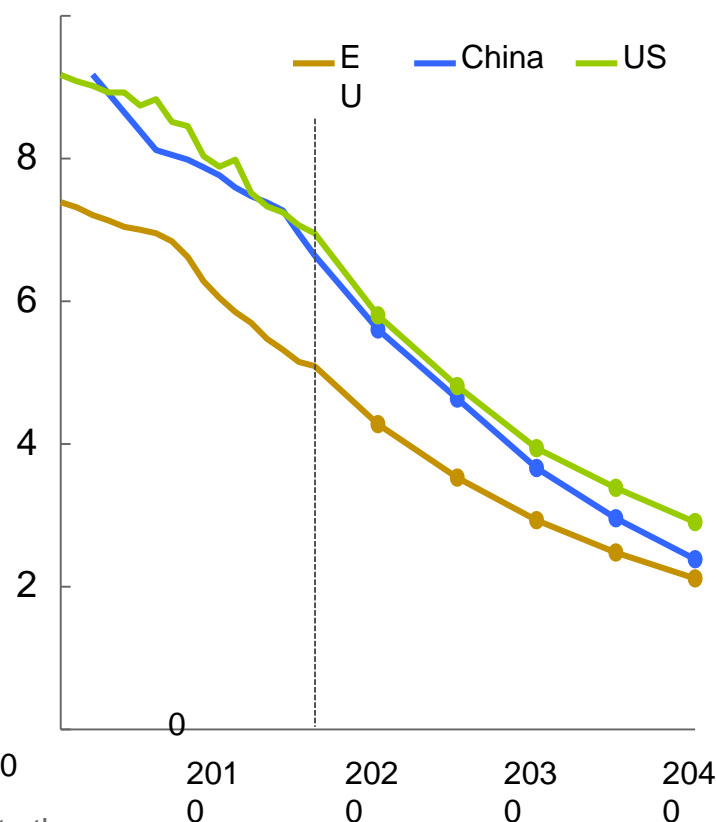
Passenger car parc by type

Billions of vehicles



Fuel economy of new cars

Litres/100km\*\*

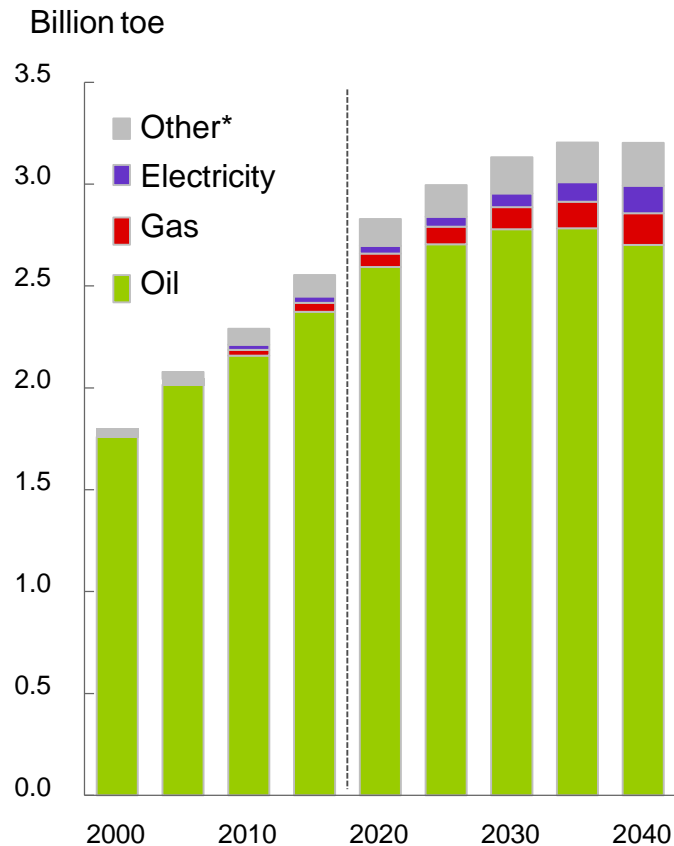


\*ICE vehicles includes hybrid vehicles which do not plug into the power grid

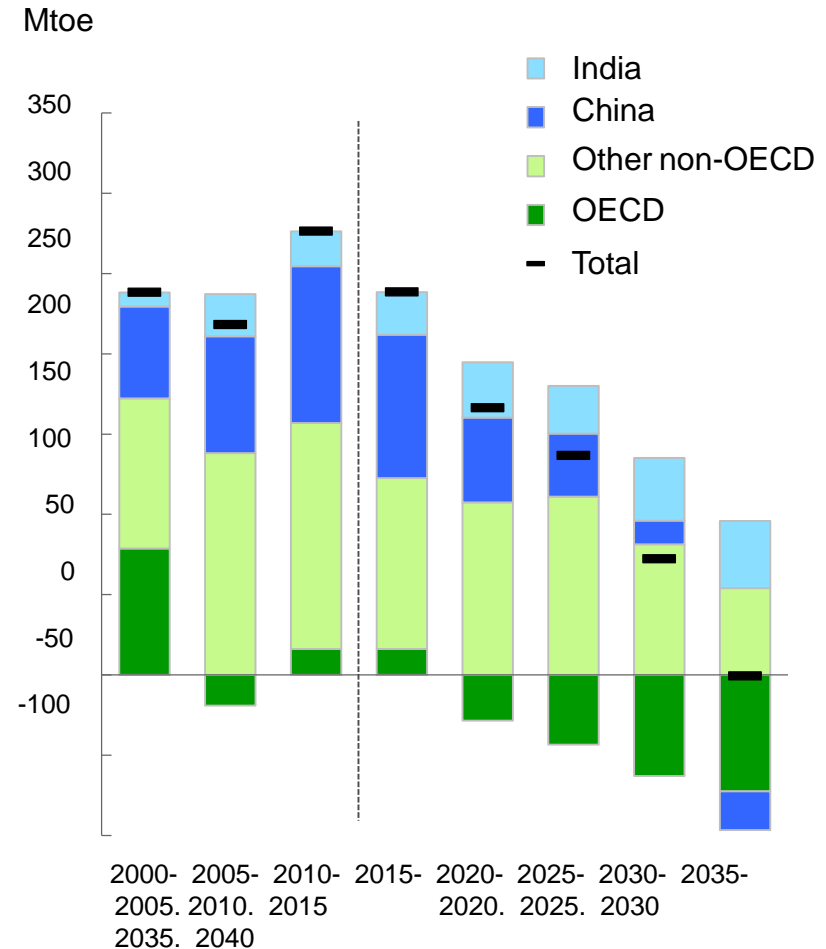
\*\*Based on the NEDC (New European Drive Cycle), gasoline fuel

# Transport demand continues to be dominated by oil, but decreasing

Transport energy consumption by fuel type



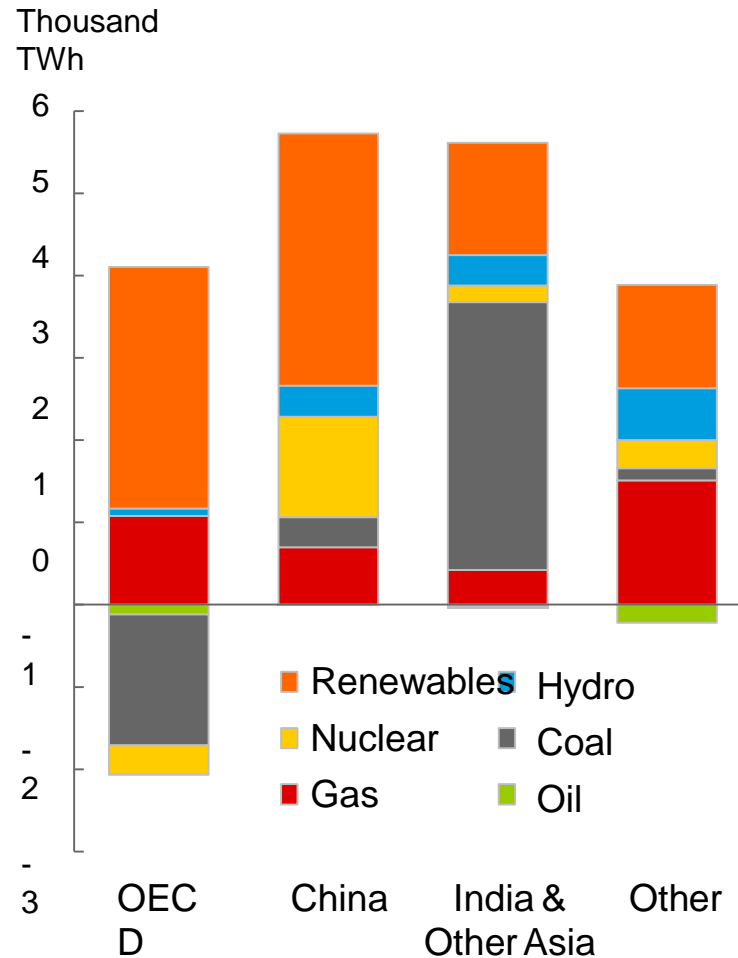
Transport energy consumption growth by region



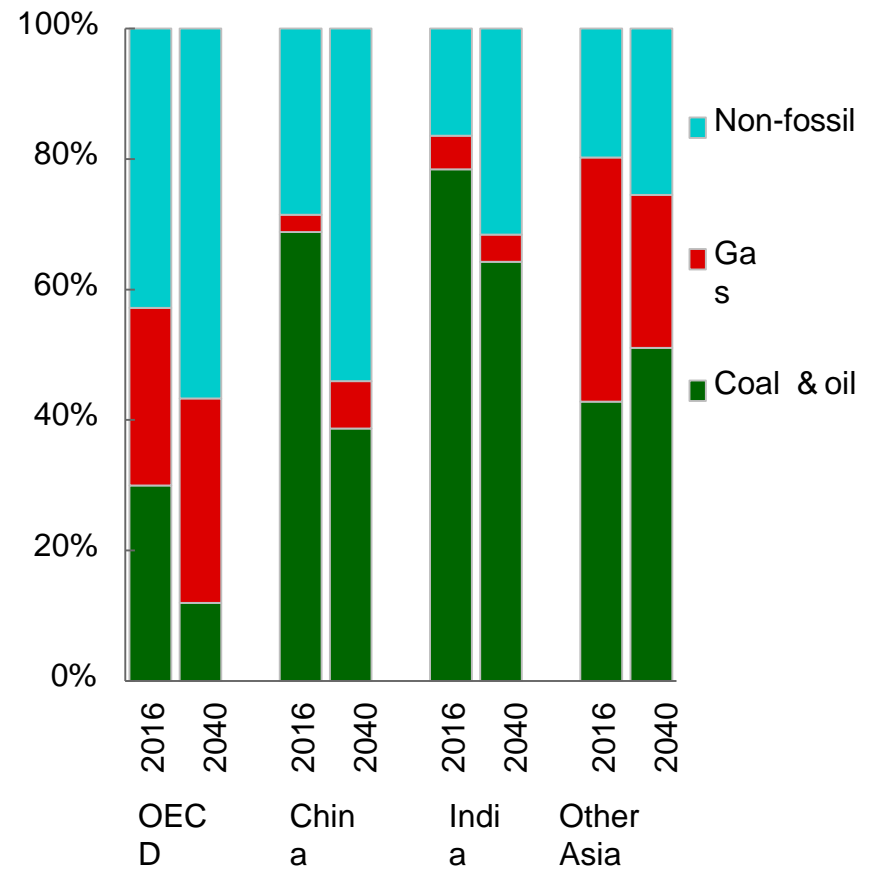
\*Other includes biofuels, gas-to-liquids, coal-to-liquids, hydrogen

# The increasing share of renewables is led by China and OECD...

Growth of power generation, 2016-2040



Shares of power generation, 2016 and 2040

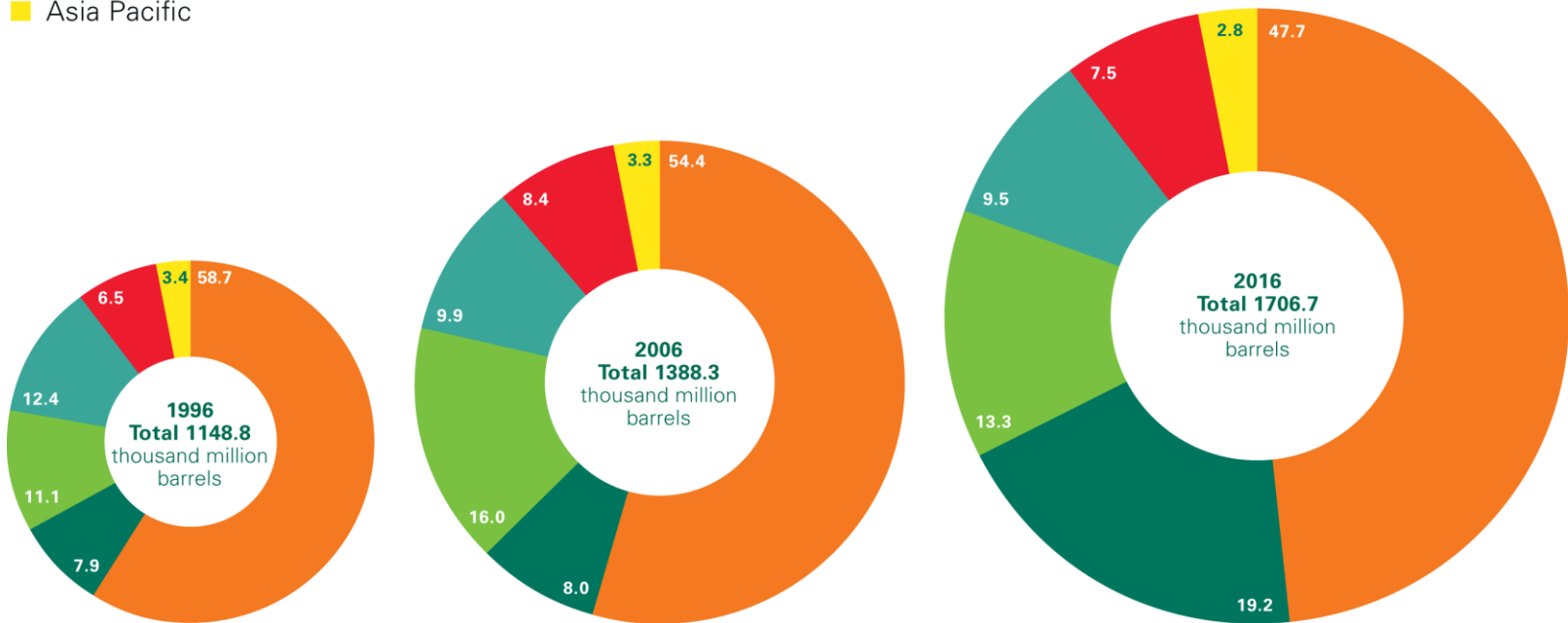


# The world still has abundant oil reserves...loosing value and power

Distribution of proved oil reserves: 1996, 2006 and 2016

Percentage

- Middle East
- S. & Cent. America
- North America
- Europe & Eurasia
- Africa
- Asia Pacific



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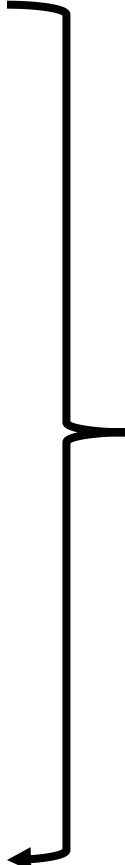
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# Emerging Markets in your lifetime

## Next decades

- ▶ Uncertain China
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- 
- ▶ **Challenges?**
  - ▶ **Opportunities?**