

China's Age of Abundance: Tracking changes with NTA Analyses

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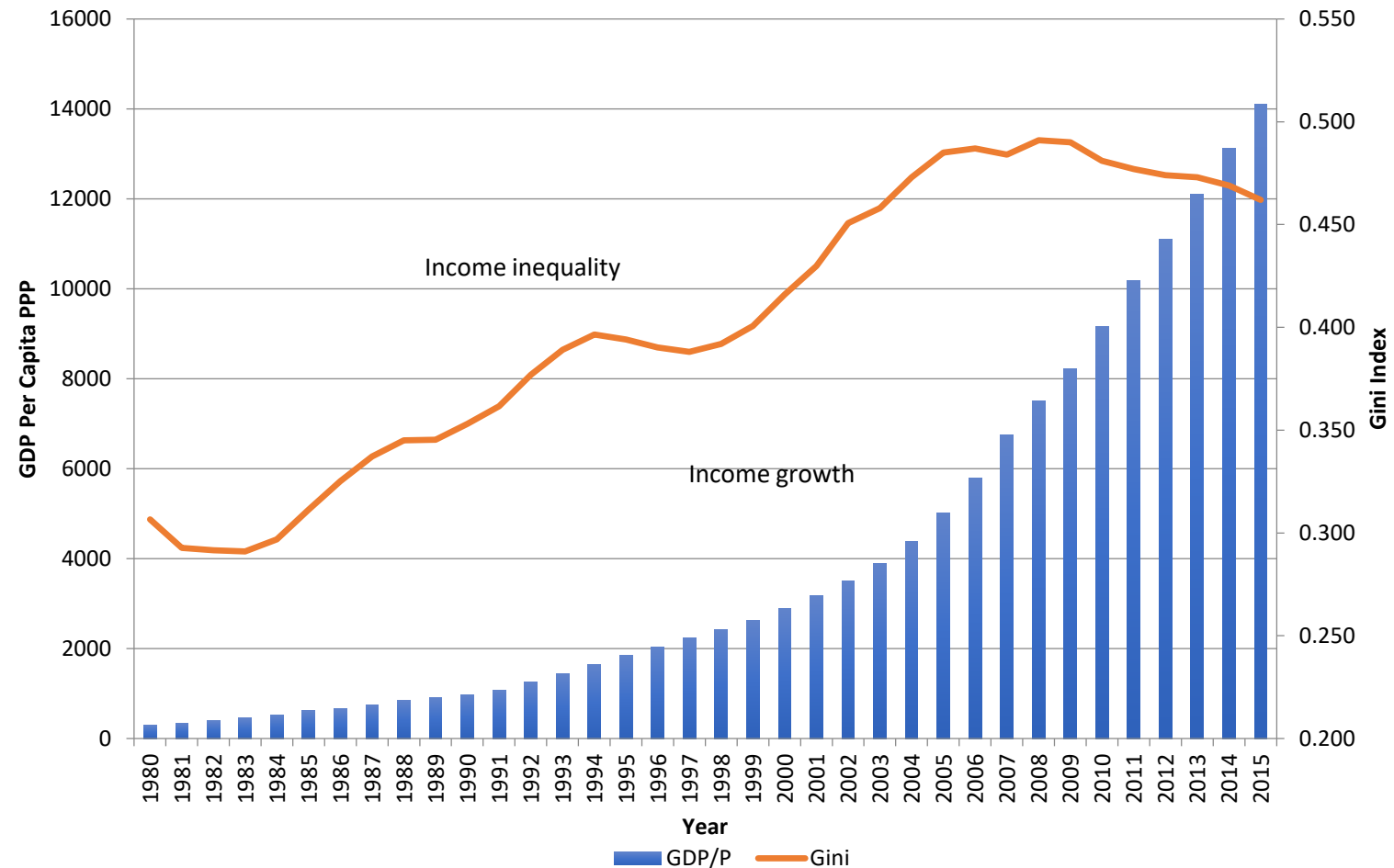
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For presentation at the 12th NTA Global Conference, Mexico City, Mexico

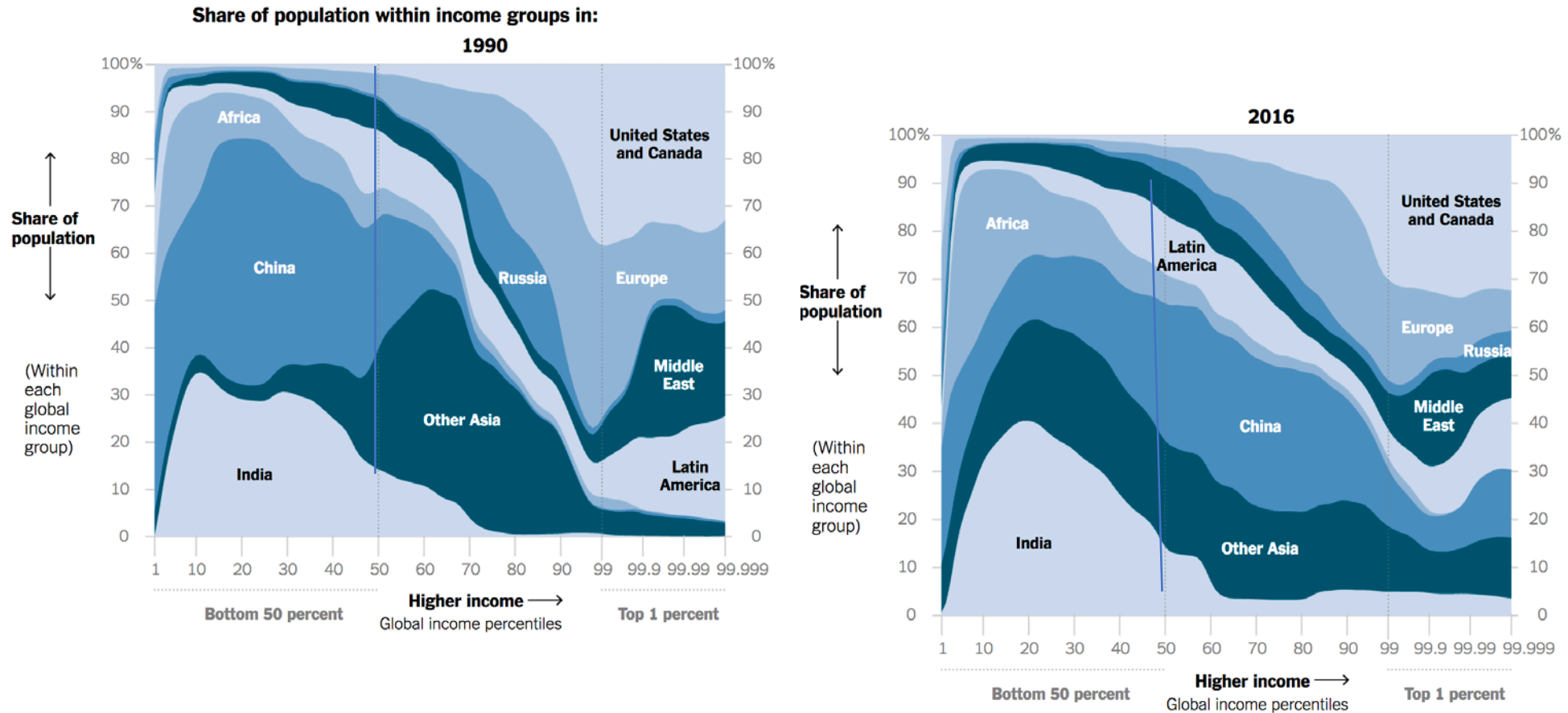
July 23-27, 2018

China's age of abundance: Growth and inequality

- Per capita GDP (PPP) rose more than 45 times in 35 years, between 1980 and 2015
- Size of economy rose from number ten to number two in the world, and will become the largest
- Income inequality (Gini) rose from 0.3 to 0.46, one of least equal in the world

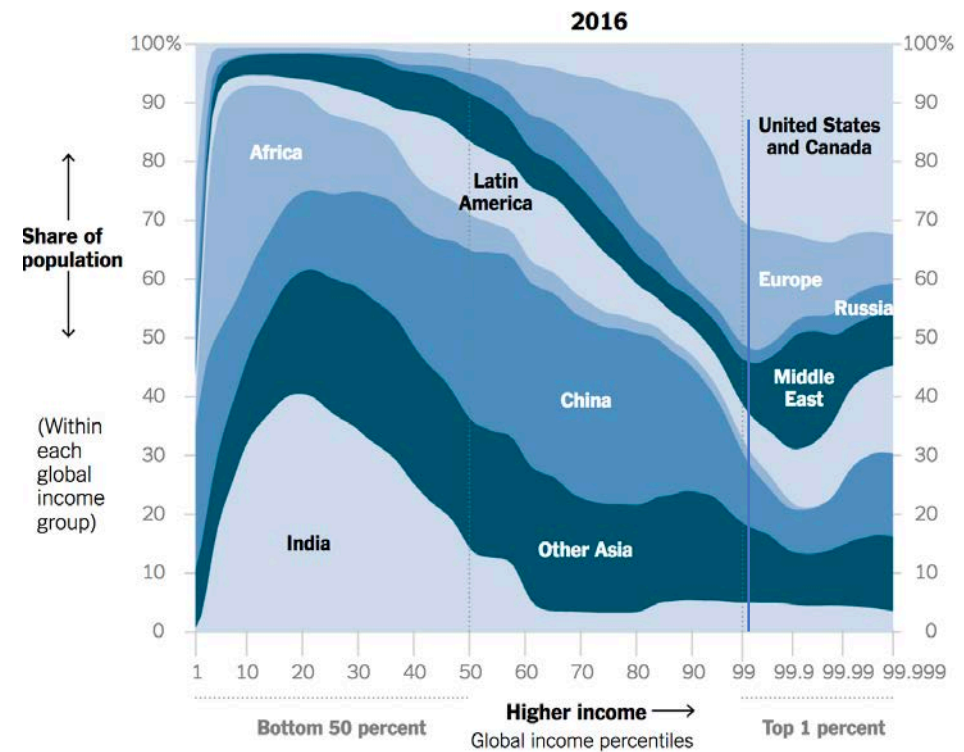
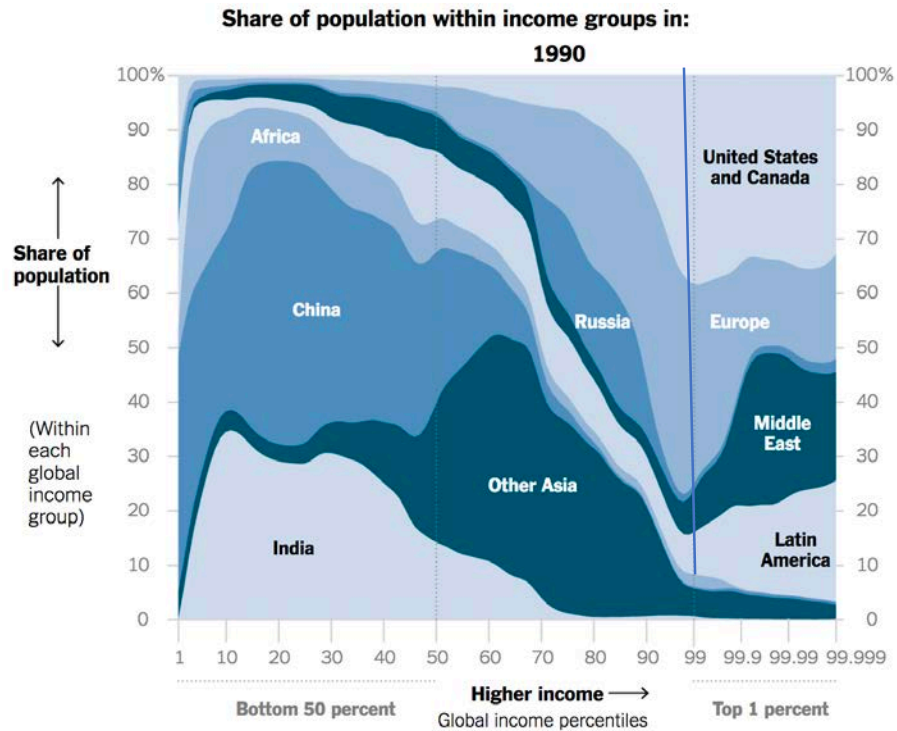


Global shifts of income, and China



Source: Eduardo Porter and Karl Russel, "It's an unequal world. It does not have to be." *The New York Times*, 12/14/2017

Global shifts of income, and China



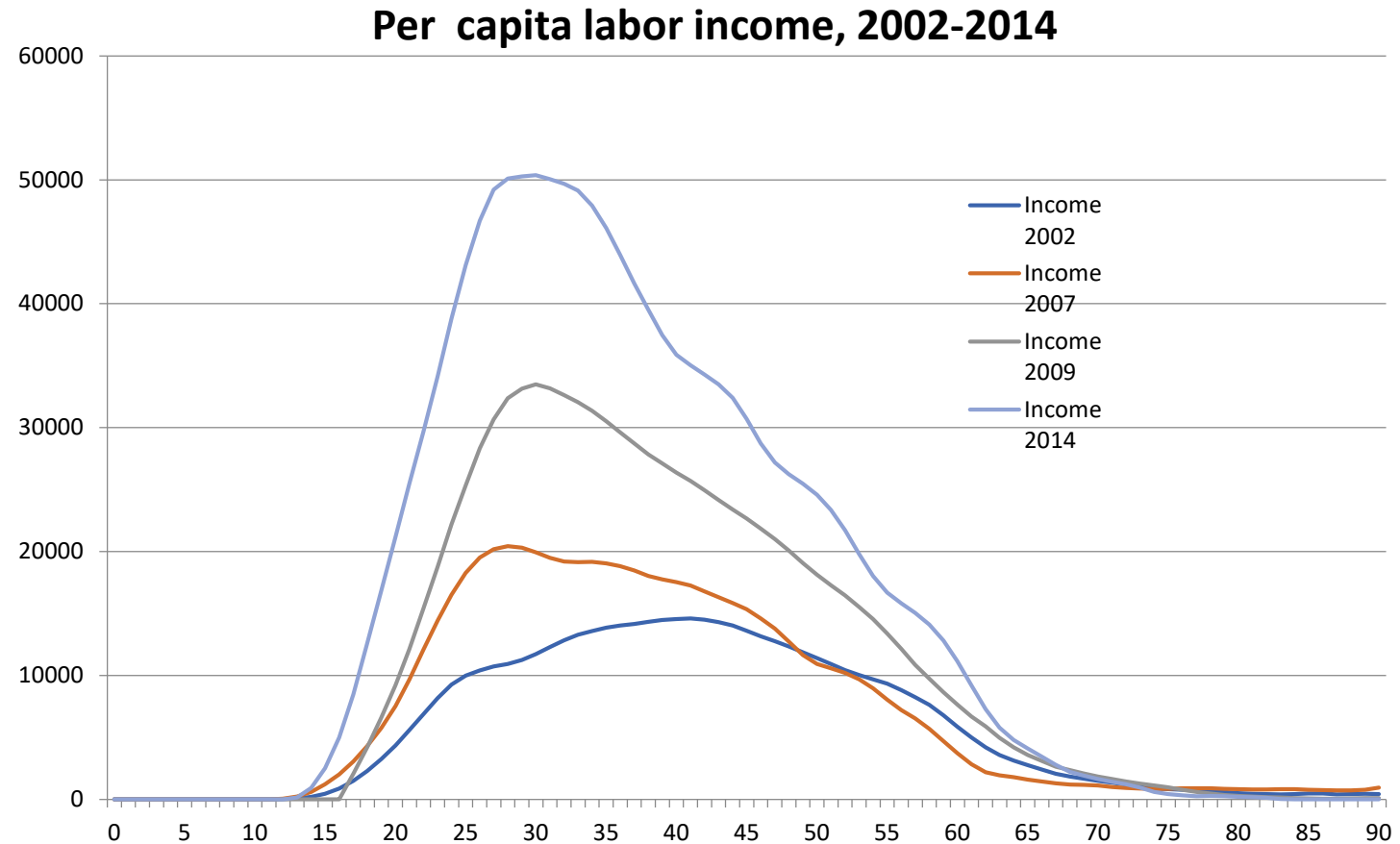
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Tracking changes with NTA analyses

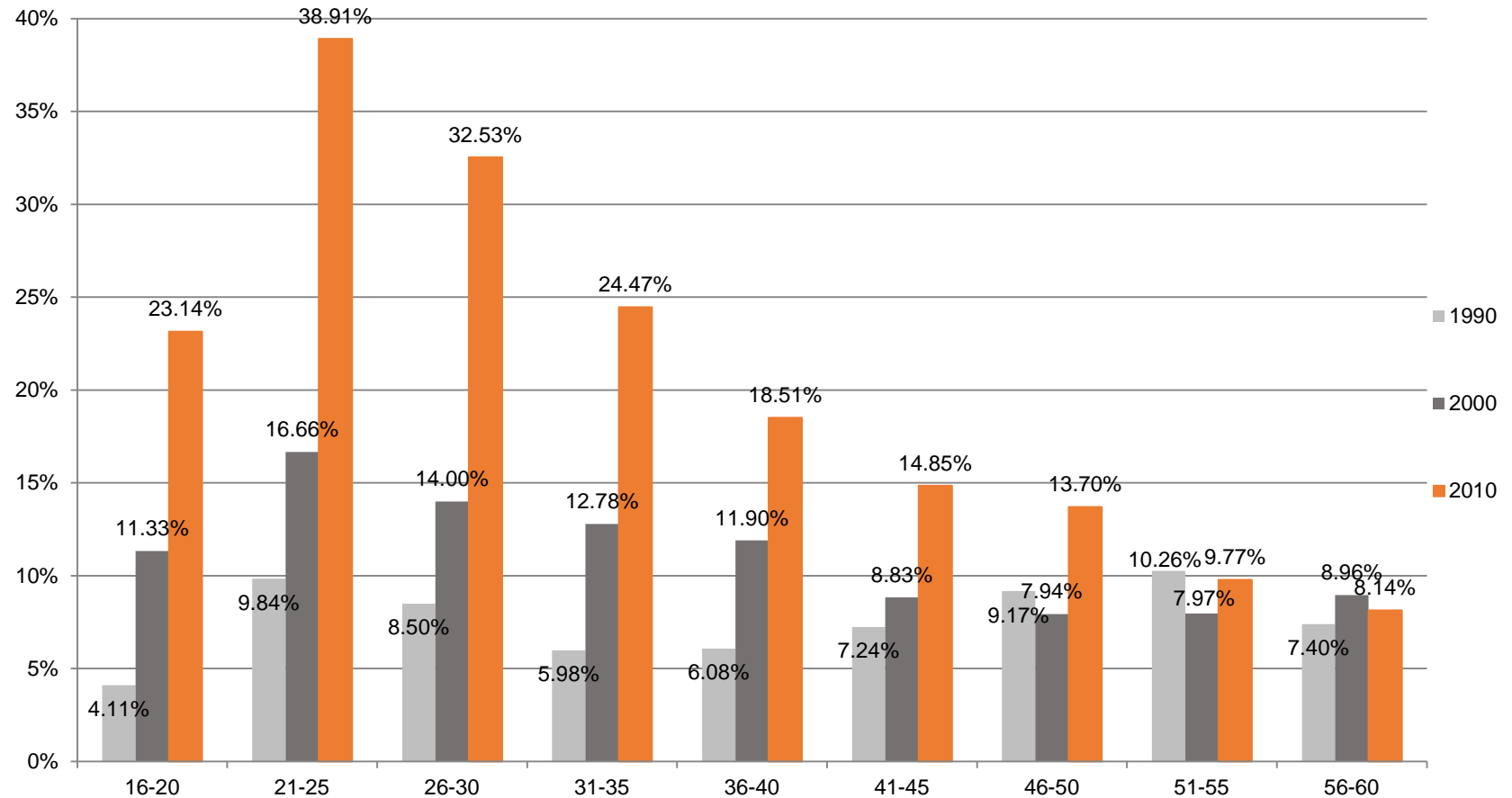
- History of NTA in China: Began in 2002, updates for 2007, 2009, 2014
 - Increasing availability of micro-level survey data
- Three key features of the decade under observation
 - Rapid income growth (quadrupling) and wealth accumulation
 - Emergence of post-socialist welfare regime
 - Accelerating population aging
- Five “faces of change” from NTA analysis
 - Income and consumption
 - Life-cycle surplus
 - Public transfers
 - Inequality
 - Fiscal implications

Rising income and age profile (with NTA adjustment)

- Per capita labor income rose by 35% between 2002 and 2007, by 53% between 2009 and 2014
- Significant shift in peak earning age, to the left:
 - Age 41, 2002
 - Age 28, 2007
 - Age 30, 2009
 - Age 30, 2014

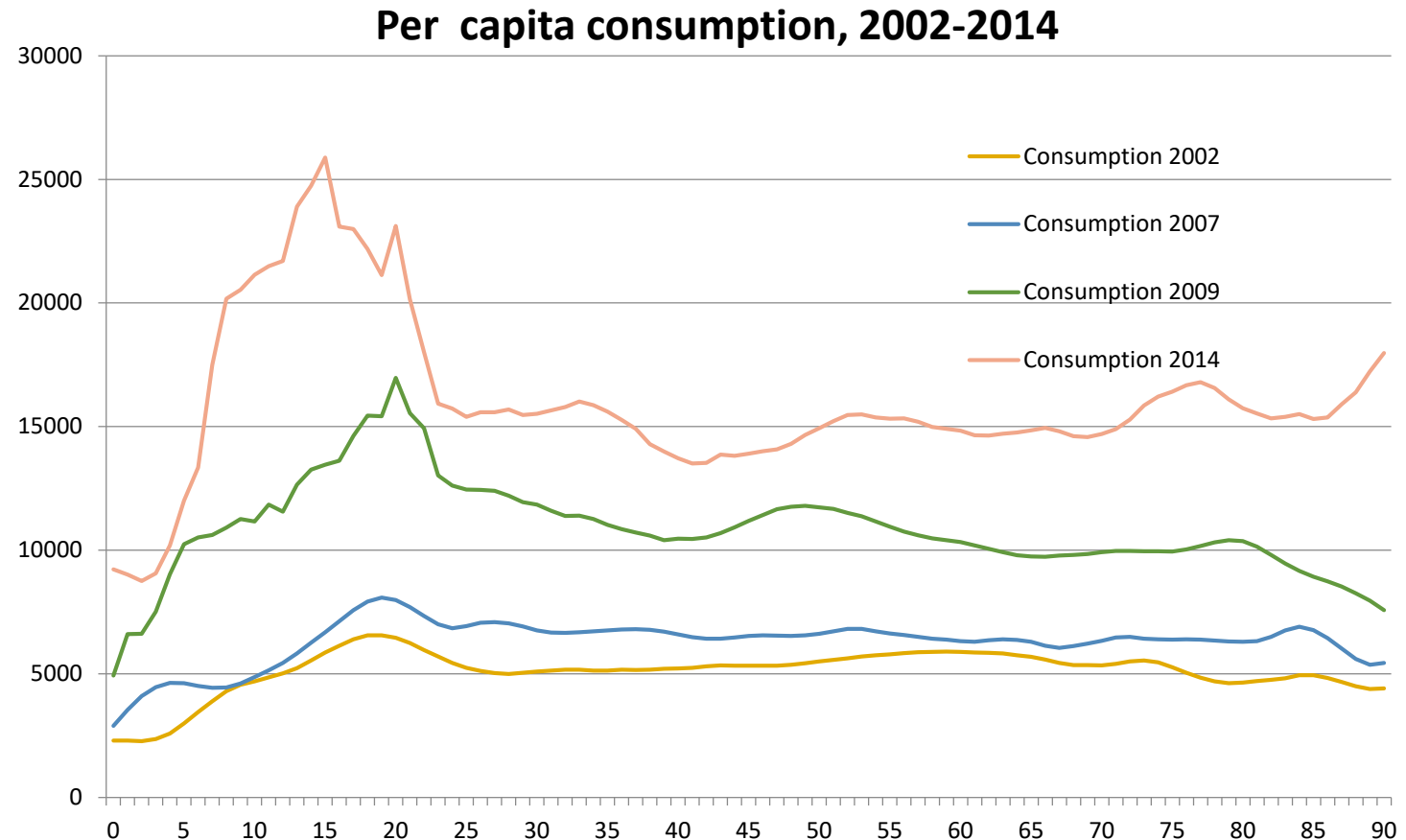


Educational expansion and generational shift (share of urban population with tertiary education)



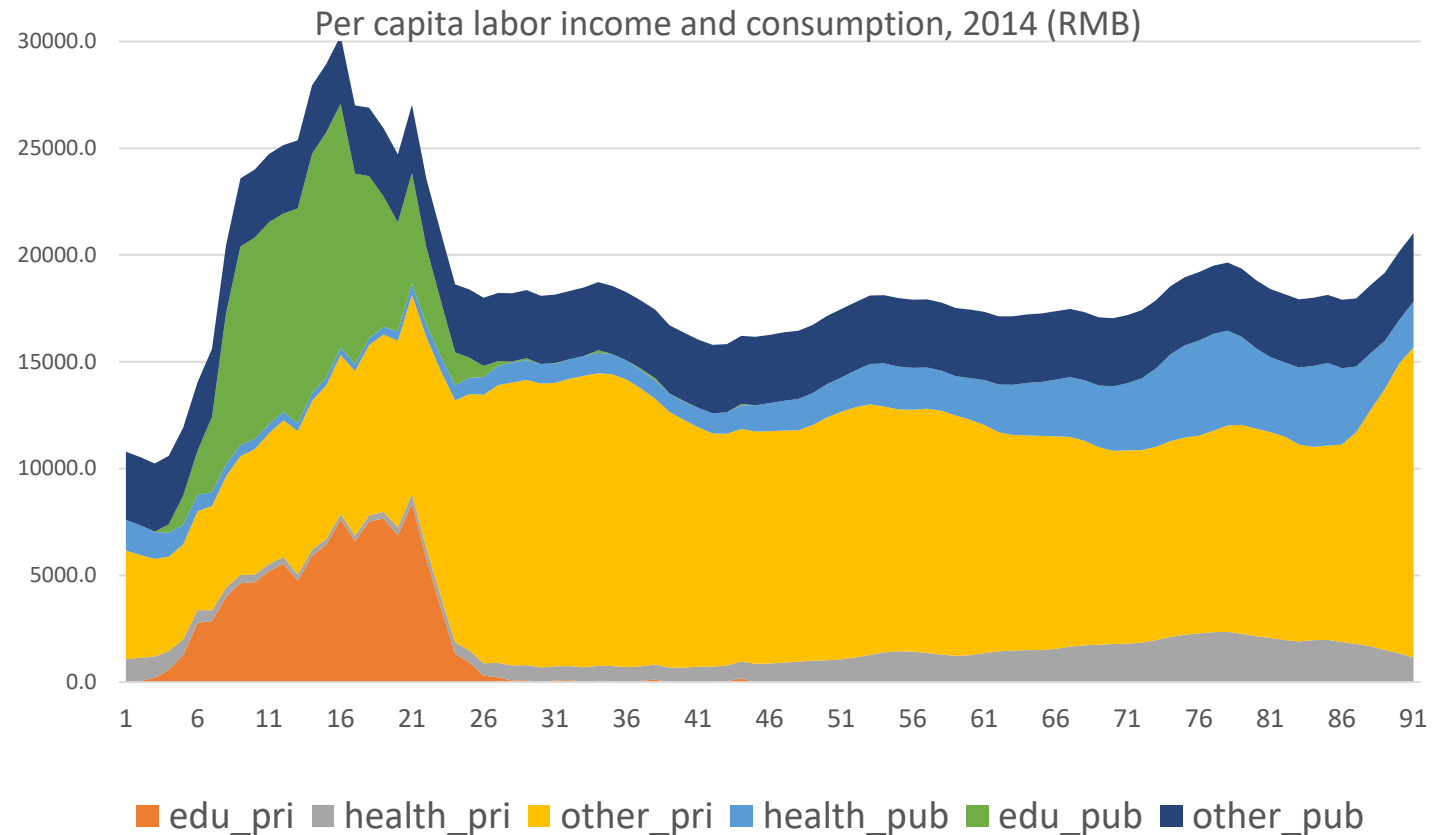
Consumption increase (following income increase, with NTA adjustment), China, 2002-2014

- Accelerating consumption growth:
Per capita consumption rose:
 - By 25% between 2002 and 2007
 - By 55% between 2009 and 2014
- Disproportional increase in ten years, on education from 15% to 16% of total spending between 2009 and 2014, and health care from 10.9% to 11.9%



Where do Chinese spend their growing income, and who pays? (Types of consumption, 2014)

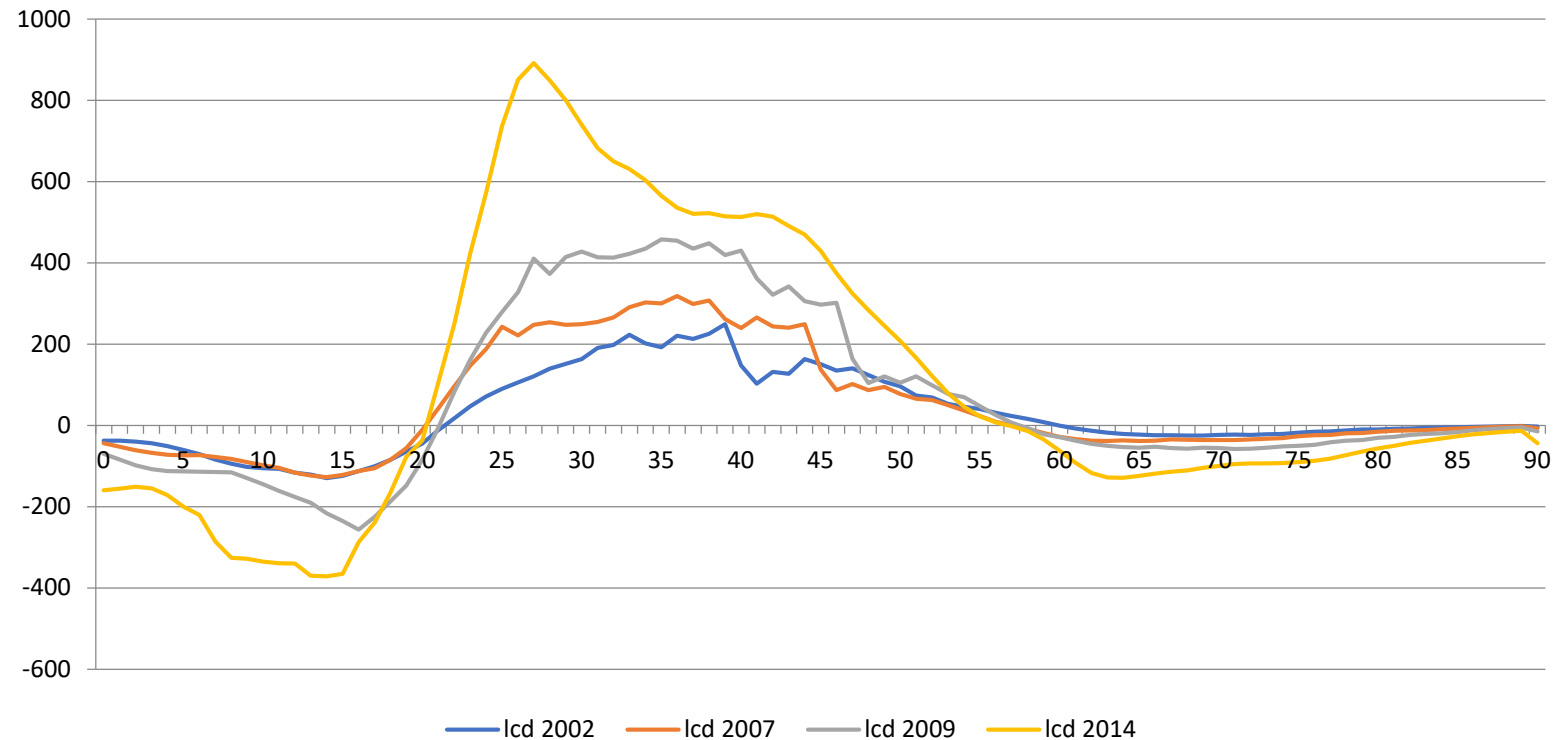
- Public spending on education outspent private spending, rising from 51% to 56% between 2009 and 2014
- Public spending on health care on per capita basis also exceeded private expenditure, rising from 57% to 60%



Life cycle surplus, China, 2002 - 2014

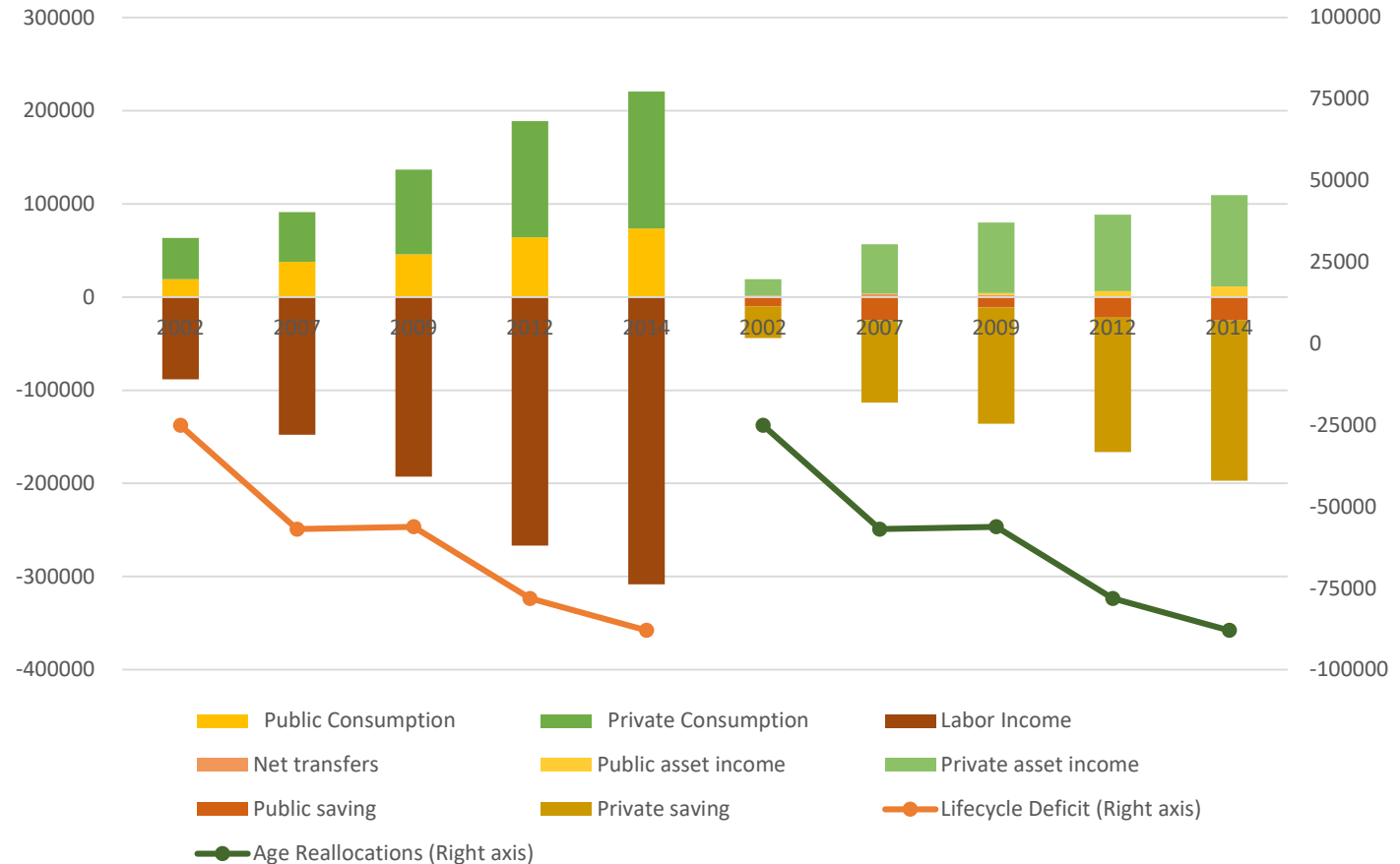
- Age range of surplus years:
 - 2002: 22 to 58
 - 2007: 21 to 56
 - 2009: 22 to 57
 - 2014: 21 to 56
- Increase and slowing down in aggregate surplus:
 - 2002-2007, 130% (per capita 120%)
 - 2009-2014, 60% (per capita 50%)

Aggregate (RMB 100 million), 2002-2014



Life cycle deficits and composition: China, 2002-2014 (aggregate, in 100 million RMB, 2009 price)

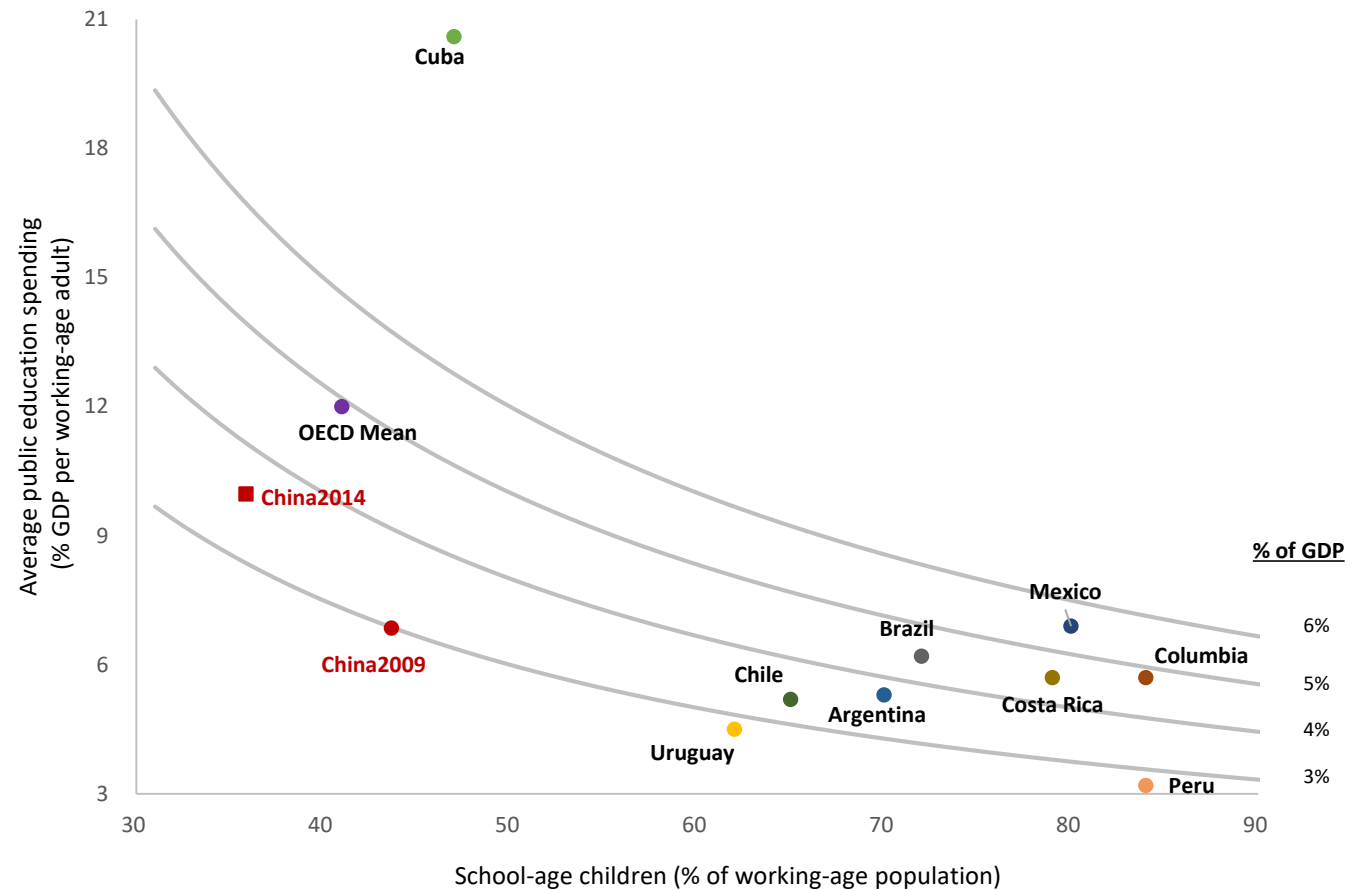
- Surplus growth at a slower pace as consumption picks up
- Private consumption increases faster than public consumption (other than education and health care)
- Private savings rose 4 times, to 17.2 trillion by 2014, but slowing down:
 - 160% between 2002 and 2007, and 40% between 2009 and 2014
- Private asset income rose 4.6 times, to 9.8 trillion by 2014, slowing down
 - 200% between 2002 and 2007, only 20% between 2009 and 2014



Public transfers: Education (global comparisons)

Significant increase in benefit generosity ratio in five years and in overall spending share, accompanied by declining share of school-age population

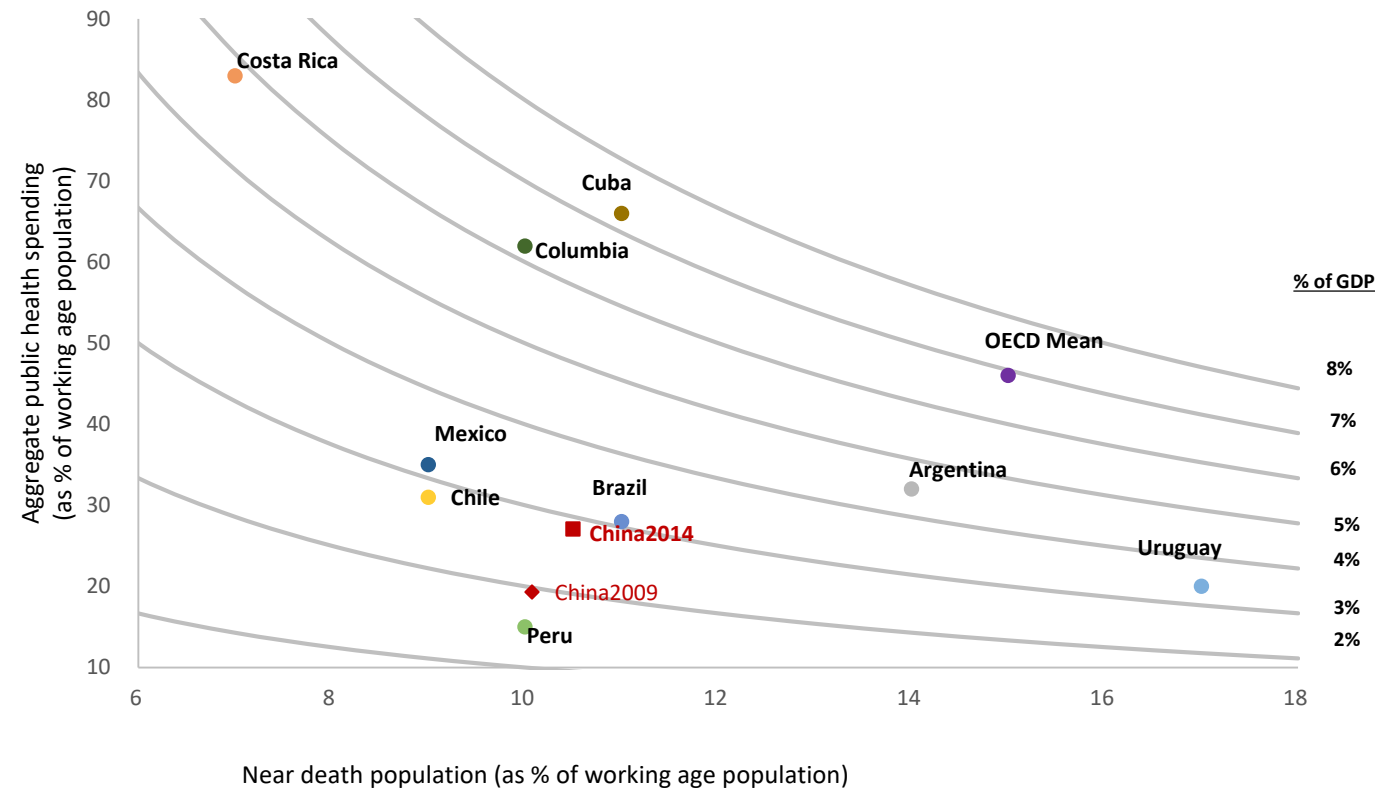
Benefit generosity ratio level surpassed Latin America but significantly below OECD average in 2009



Public transfers: Health care (global comparisons)

Overall health care spending increased due to both higher benefit generosity ratio and slight population aging

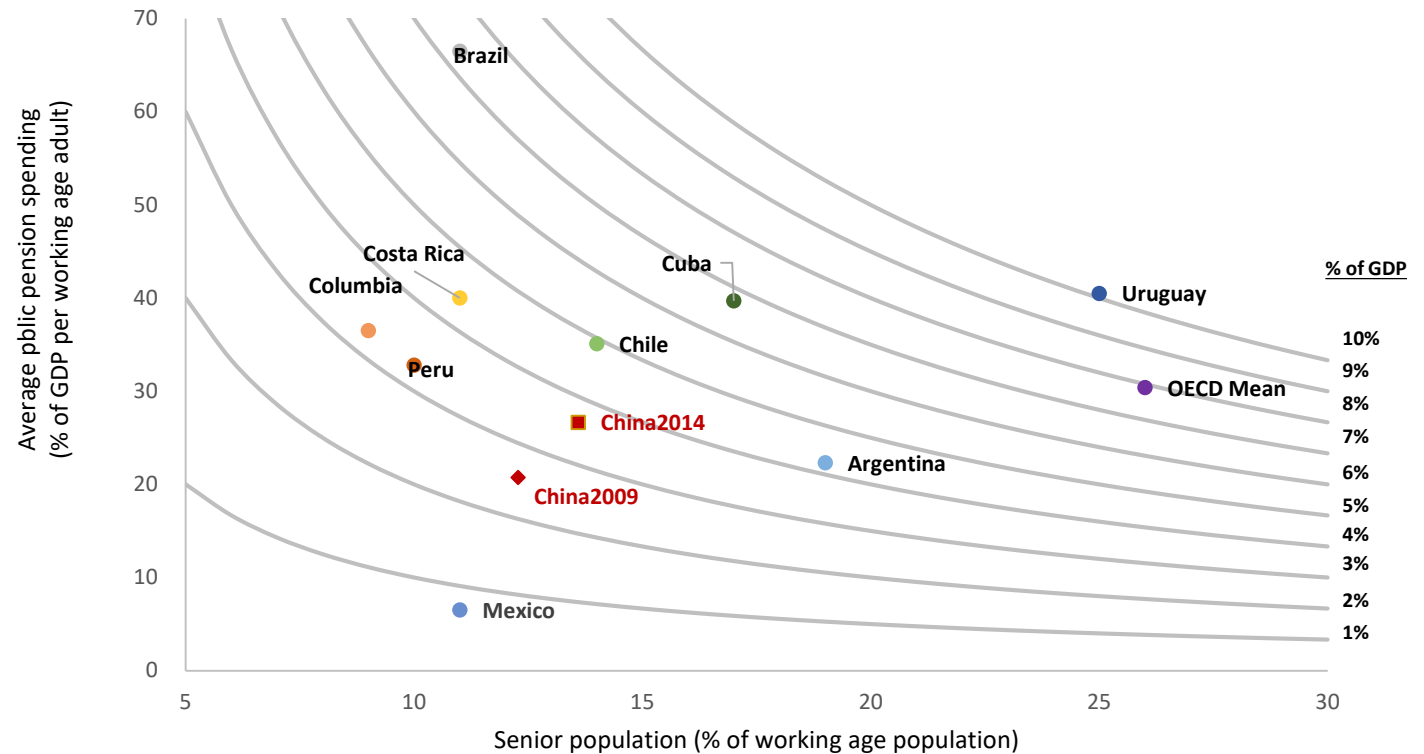
Health spending much below most Latin American comparisons and OECD average



Public transfers: Pensions (global comparisons)

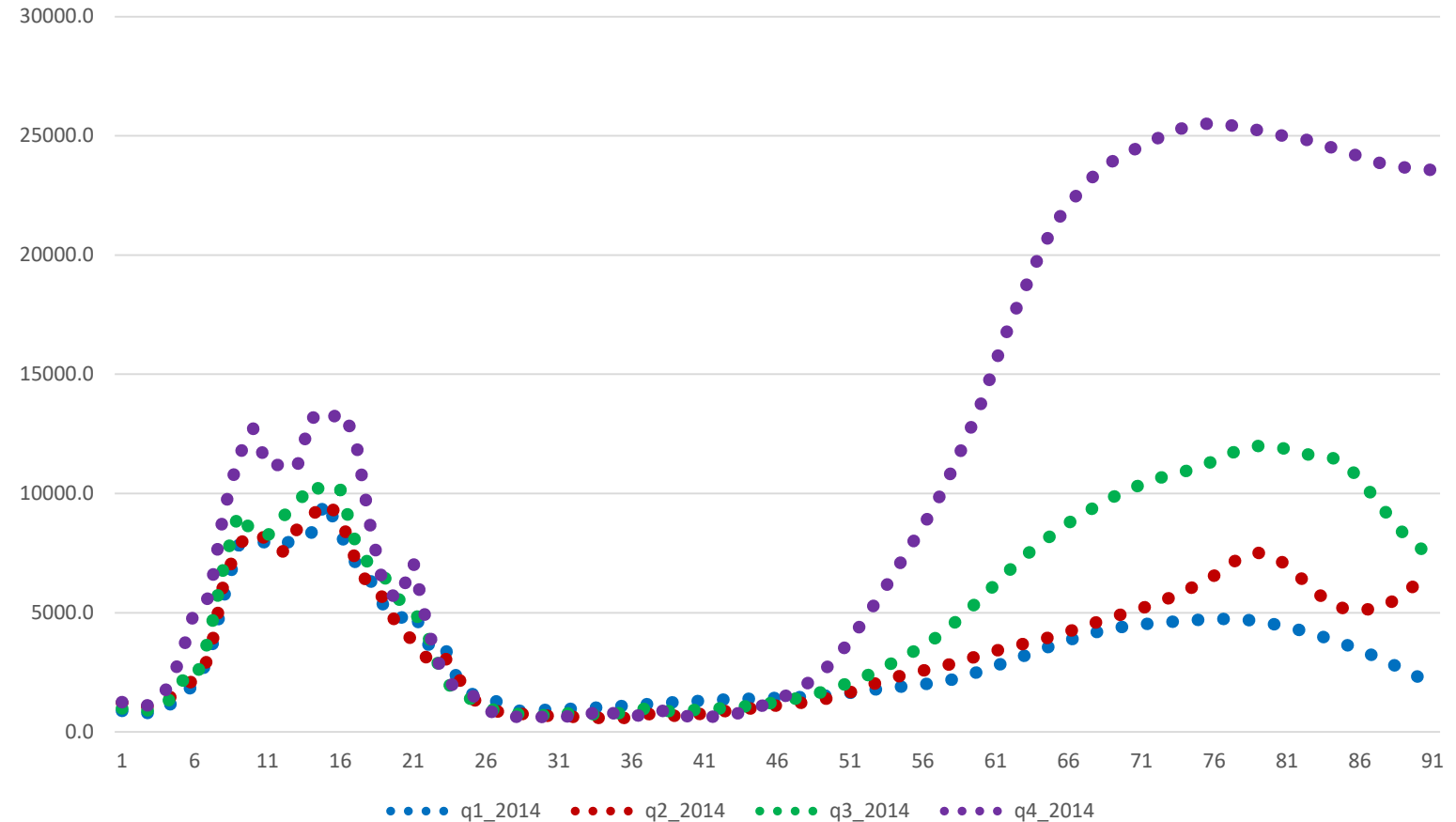
Pension spending increased due to both rising benefit level and population aging

Benefit generosity ratio below most Latin American comparisons, and somewhat below OECD average in 2009



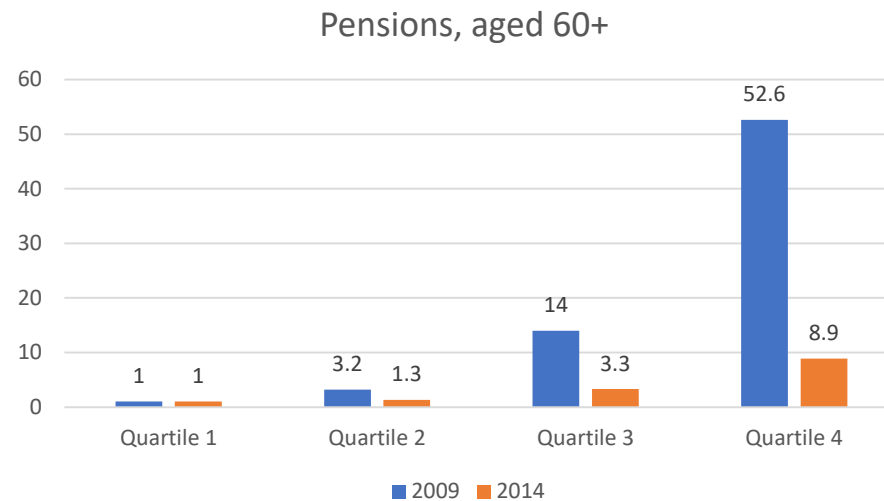
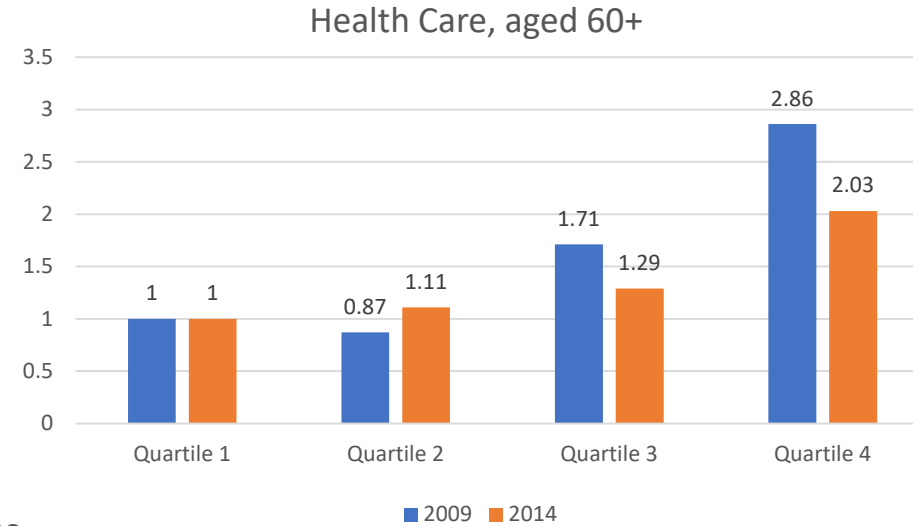
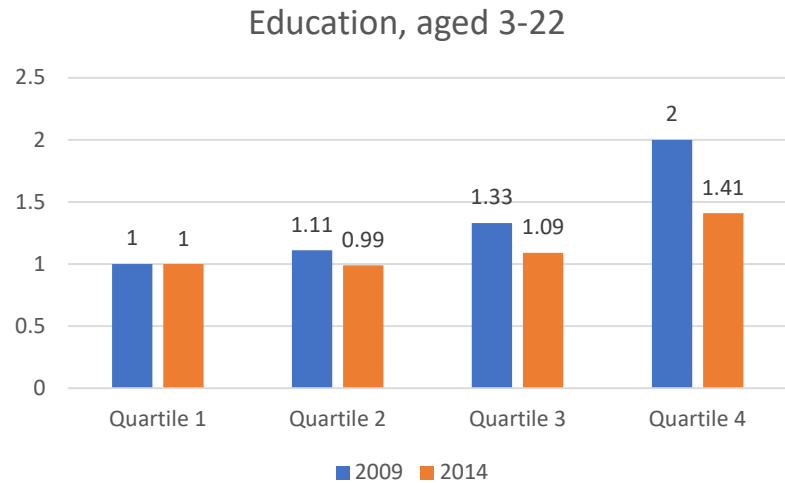
Inequalities in public transfers, combined, 2014

- At almost every age, those in higher income quartiles received more public transfers
- In education, the ratio between the top and the bottom income quartile groups is 1.2, in health care 1.4, and in pensions for those aged 60 and over almost 9 to 1
- With the three items combined, the ratio between the top income quartile group and rest is about two times



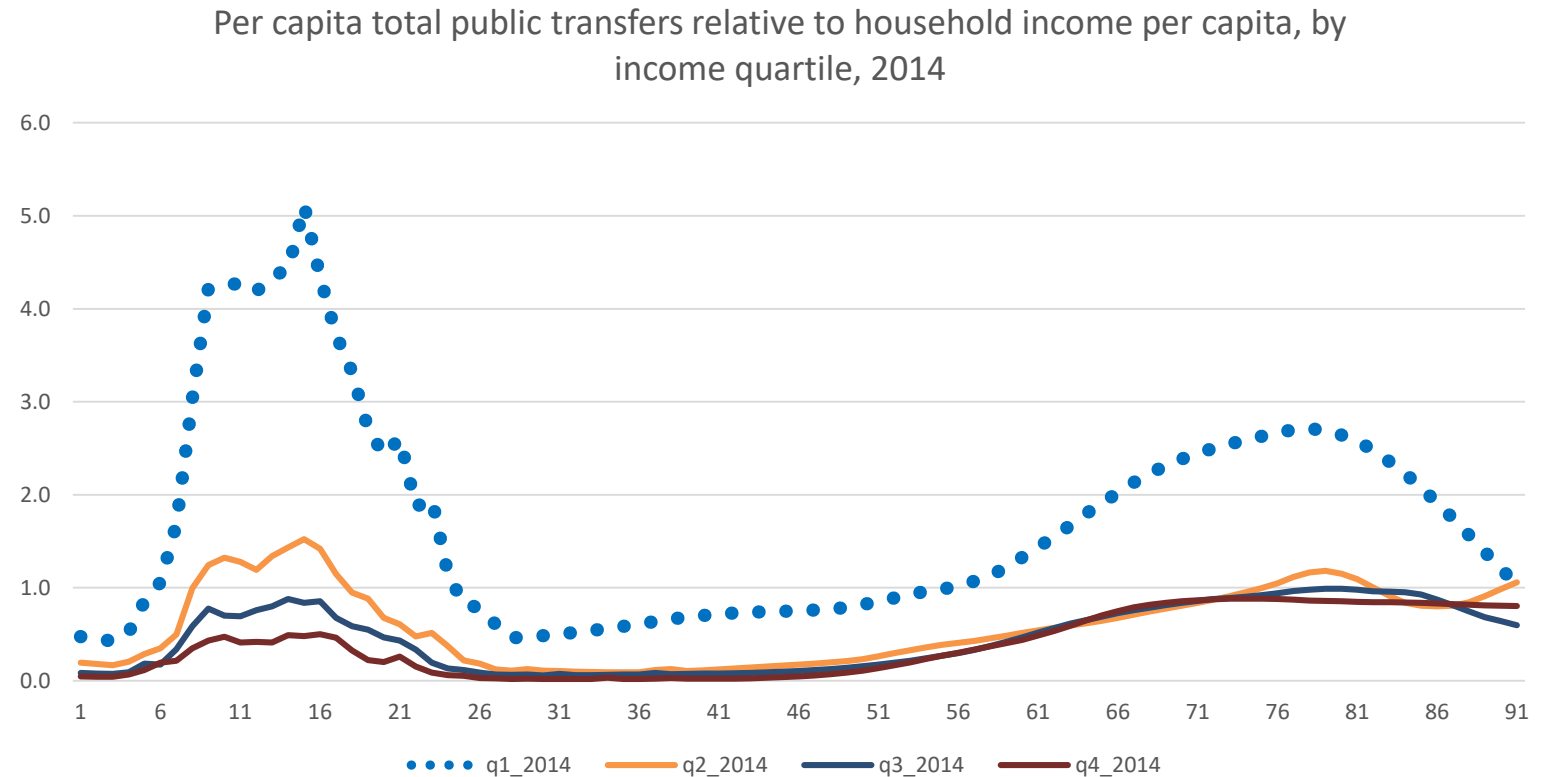
Inequalities reduced between 2009 and 2014

(Per capita transfer received relative to quartile one)



Inequality-reducing effects of public transfers

- In comparison to income level, the lowest income quartile households received proportionally much more
- This is especially the case for education and old-age support

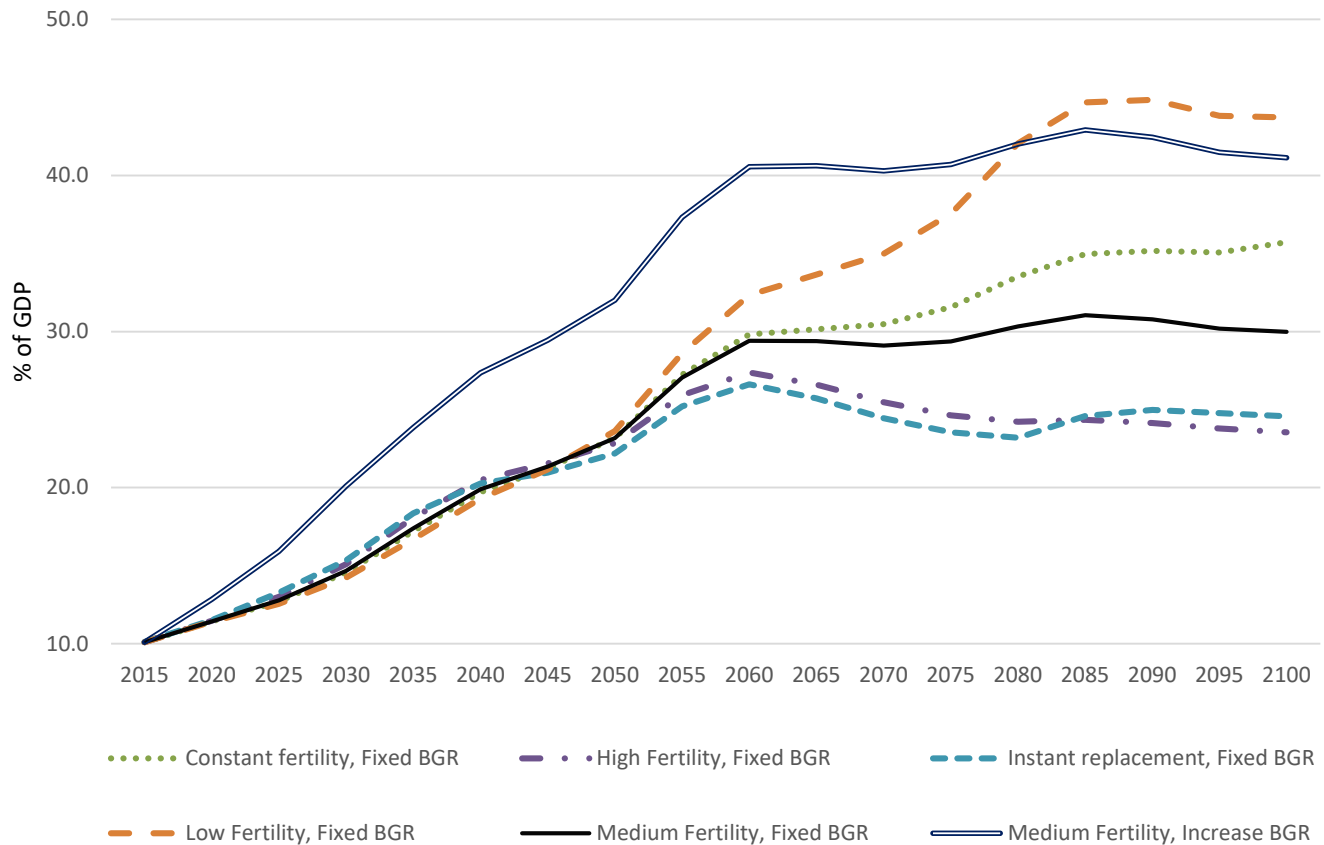


Adding together: Short and long term

Regardless of fertility assumptions, population aging will push up social spending to around 15% of GDP by 2035 and more than 25% by 2055

Moving up the benefit ratio to OECD average could push up spending to more than 30% of GDP by mid 21-century

Different fertility scenarios will start to have profound effects after mid 21st century



China after abundance?

- China's historical economic boom has entered a new era, with a slower growth rate
- Rapid income increase led to an enormous surplus, now also increasing at a slower rate
- Consumption growth began to catch up with labor income increase
 - Share of prime-working-age labor income increased from 38% in 2002 to 42% in 2014
- Public investment in education promises future growth
- Increased but unequal public transfers helped to reduce inequality
- Rapid population aging and welfare expansion impose serious fiscal constraints in the coming decades
- Slowing surplus growth, persistent inequality, and rising fiscal burden will define China's post-abundance era