



# Comparing Real Wages using McWages

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# Ideal Cross Country Wage Comparisons

- living standards – evaluate the success of reforms in a way that is not easy to manipulate, condition on hedonic job qualities
- price of an identical factor of production – a standardized amount of human capital – serves
  - to measure productivity differences
  - as ingredient for
    - trade models
    - output-accounting decompositions
    - efforts to estimate the benefits of migration

# McWages

Entry-level basic-crew jobs at McDonald's are virtually identical in terms of

- skill input
- technology (productivity)
- hedonic job qualities
- producing identical product

in over 140 countries of the world.

Operations are monitored using 600-page *Operations and Training Manual*

- McDs do not adjust technology
- pay local market wage (MP)

# Data Collection

- **80** countries since 2014, 65 since 2007, 27 since 2000
- Hourly wages of crew + price of Big Mac

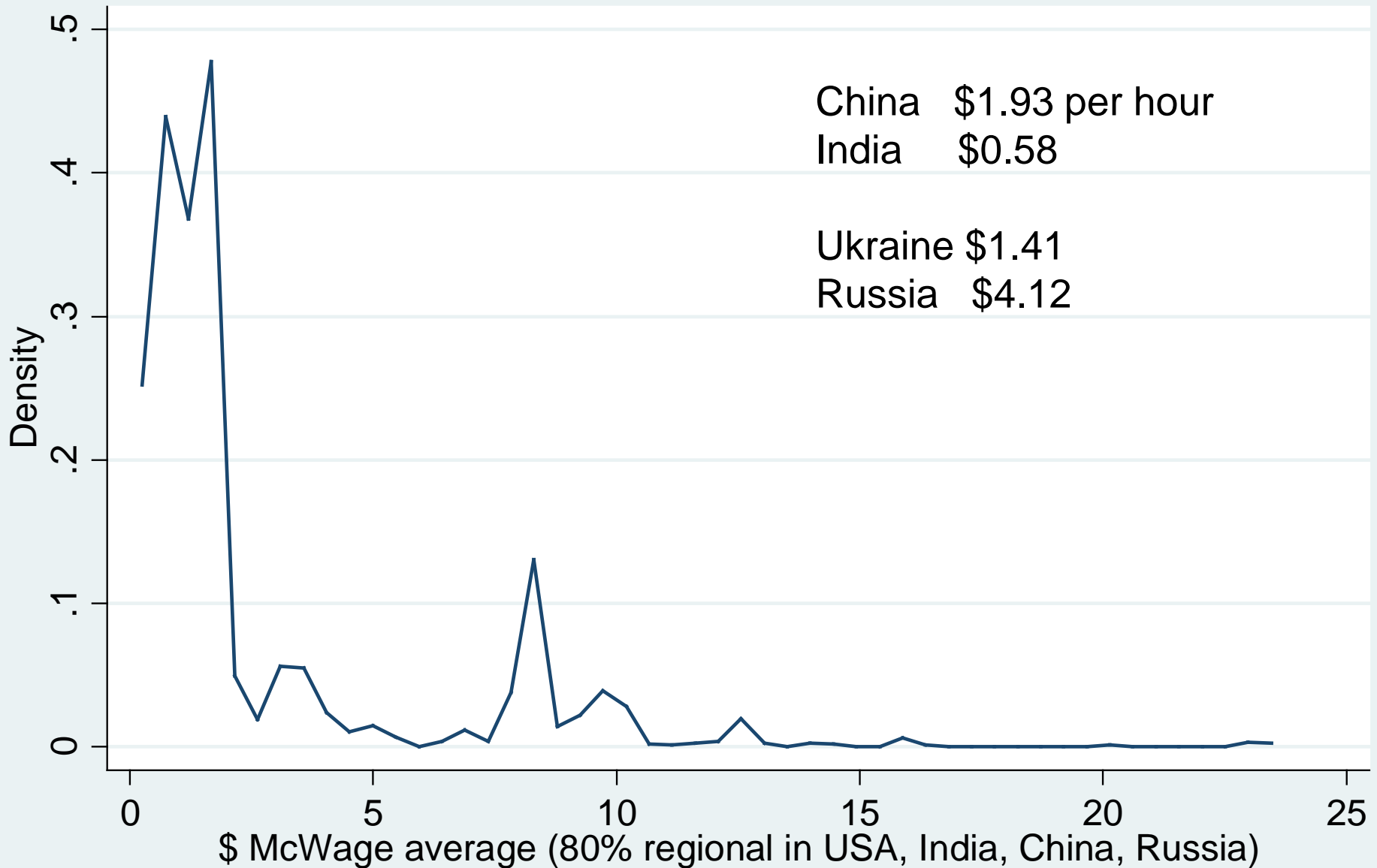
# Big Macs per Day (BMPH\*8) in 2014



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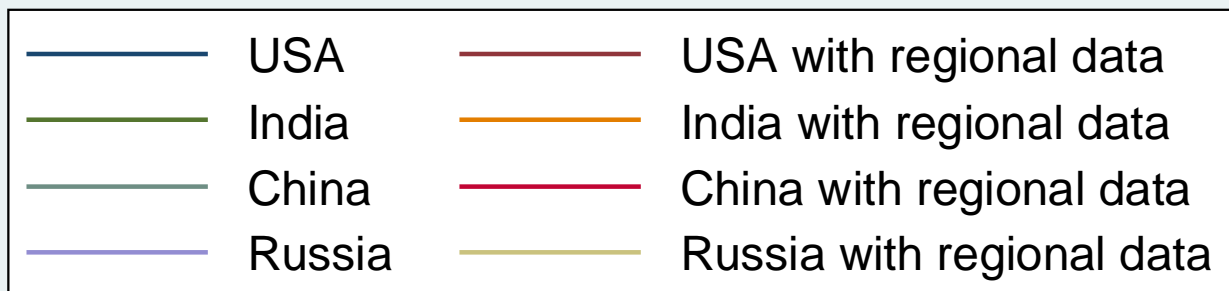
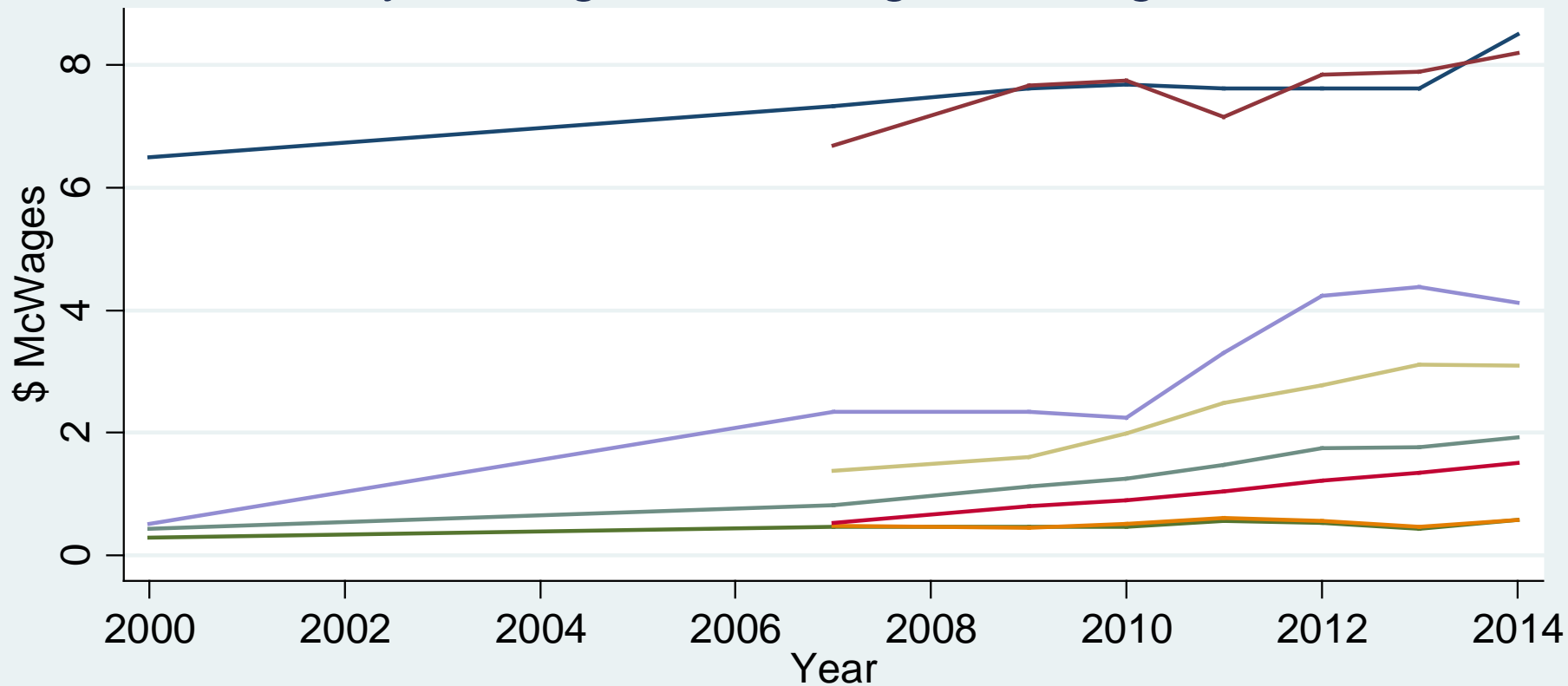


# McWages in 2014, pop.-weighted country density



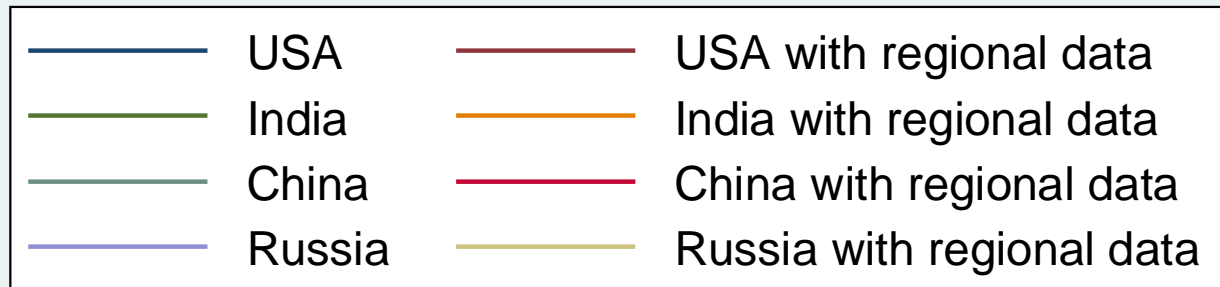
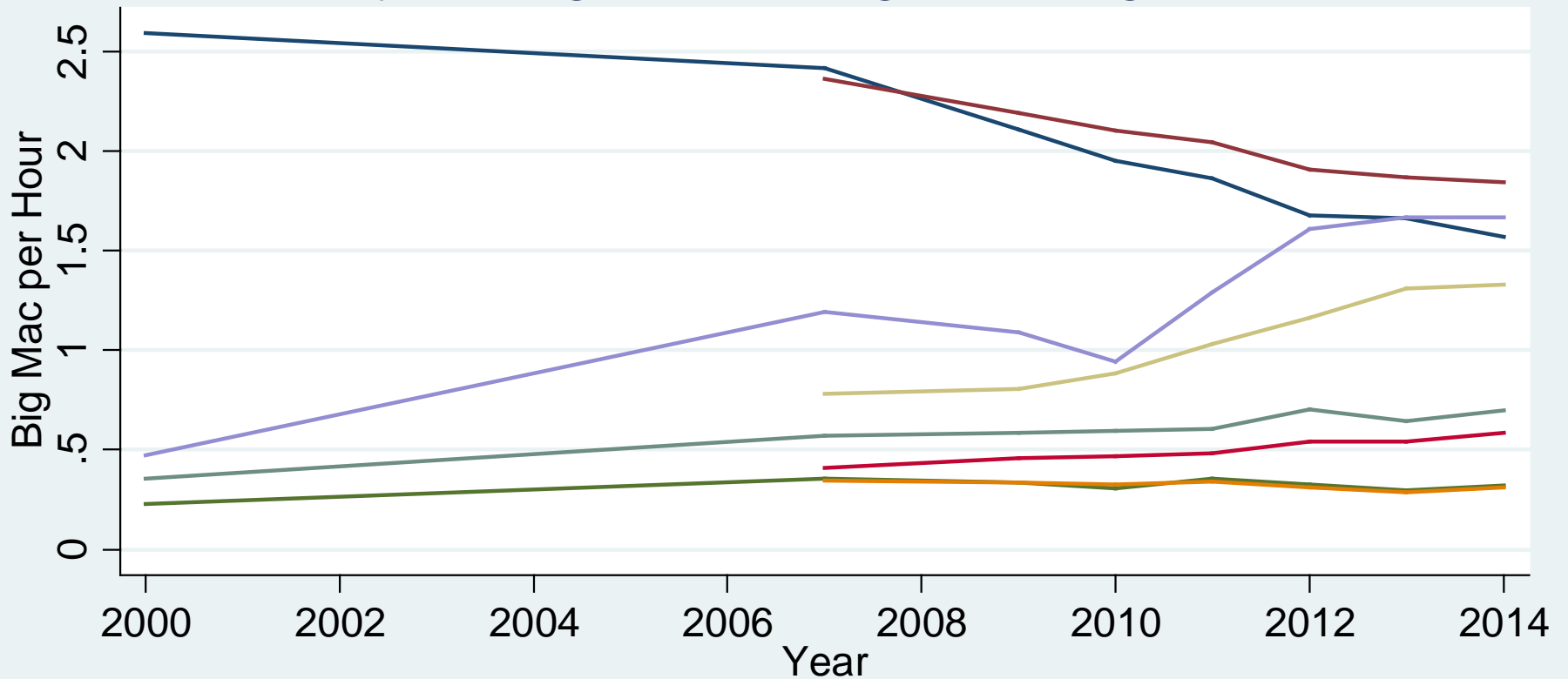
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# Evolution of McWages: 2-city average vs. average with regional data





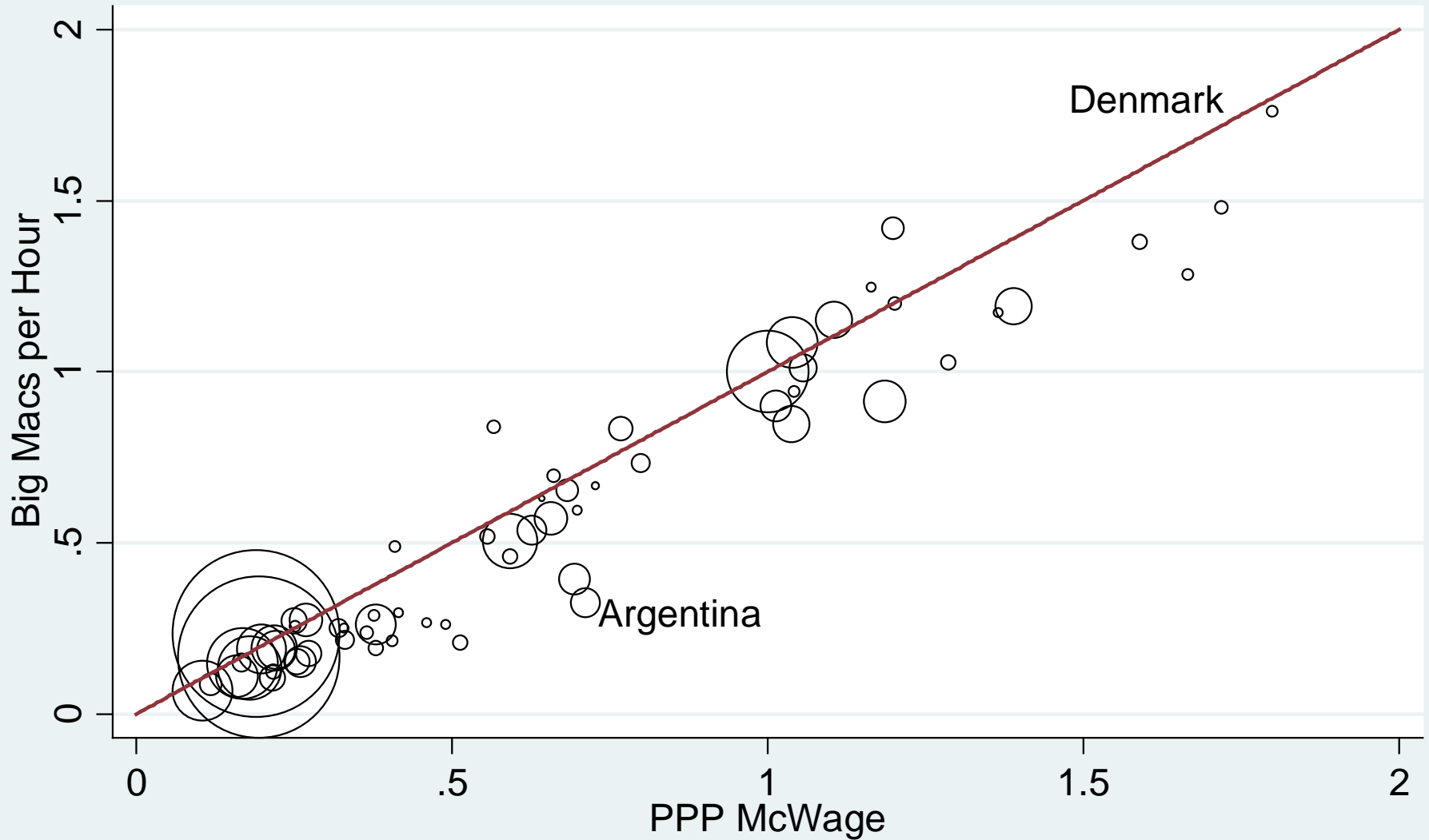
# Evolution of BMPH: 2-city average vs. average with regional data



# Comparison to other Wages

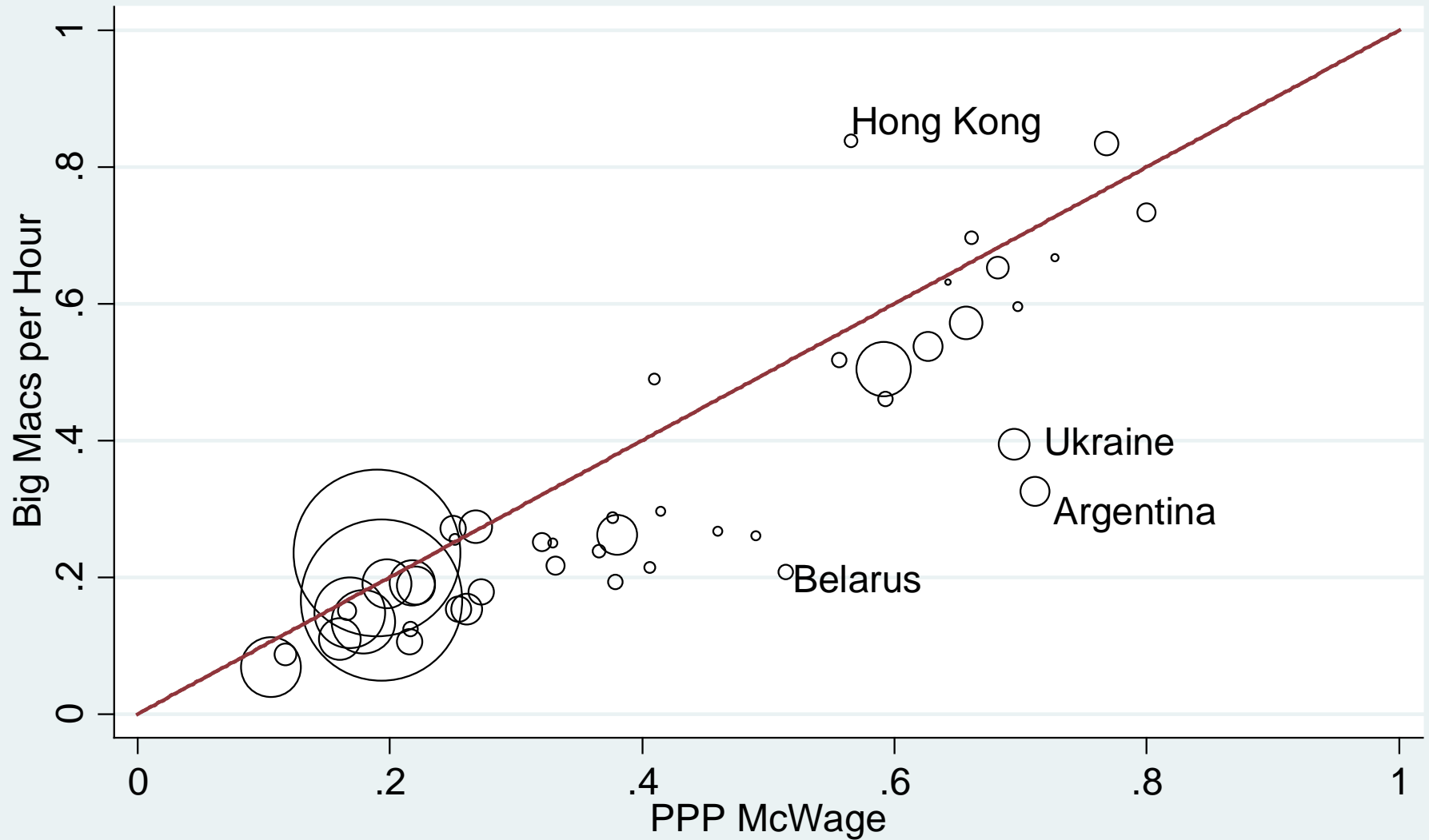
- SbWages close to McWages for 36 countries, except for the high Dutch SbWage.
- McWages more consistent than ILO wages and available in more countries than BLS or ICP. Of 34 BLS countries only 5 are non-OECD, of 80 McWage countries 52 are.
- Can use McWages to check ICP or ILO wages.
- In rich countries McWages diverge from manufacturing wages due to minimum wages.
- On average McWages grow about 15 p.p. faster than manuf. wages, both in 2007/0 and 2012/7 although growth gap more uneven in 2012/7.

# Purchasing power of McWages in 2011



Note: All values relative to the US. Weights correspond to population.  
McWages in 2005 US\$ adjusted by price level of household consumption.  
R-squared = 0.93.

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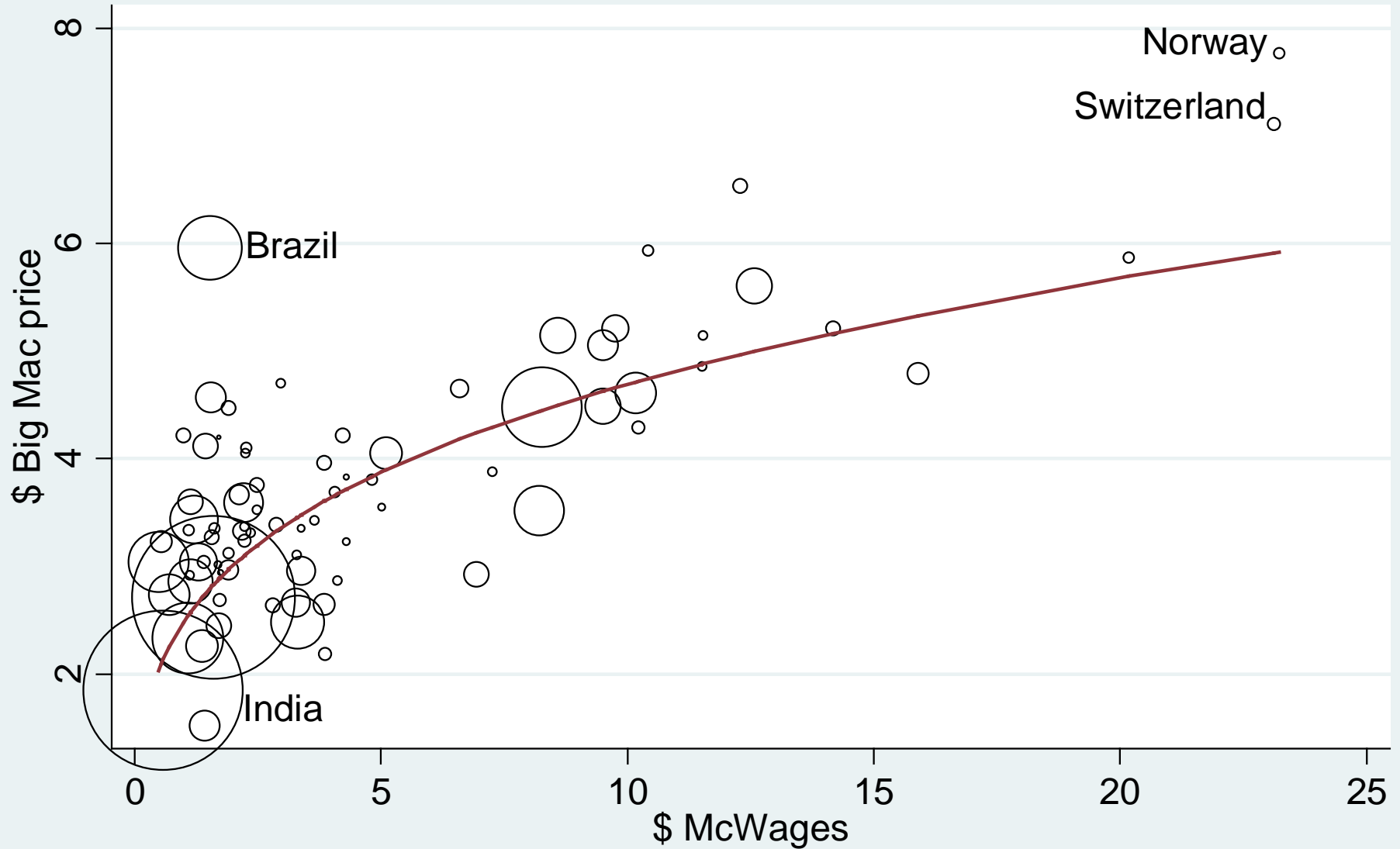


Note: All values relative to the US. Weights correspond to population.  
McWages in 2005 US\$ adjusted by price level of household consumption.  
R-squared = 0.76.

# Is BMPH similar to PPP McWage?

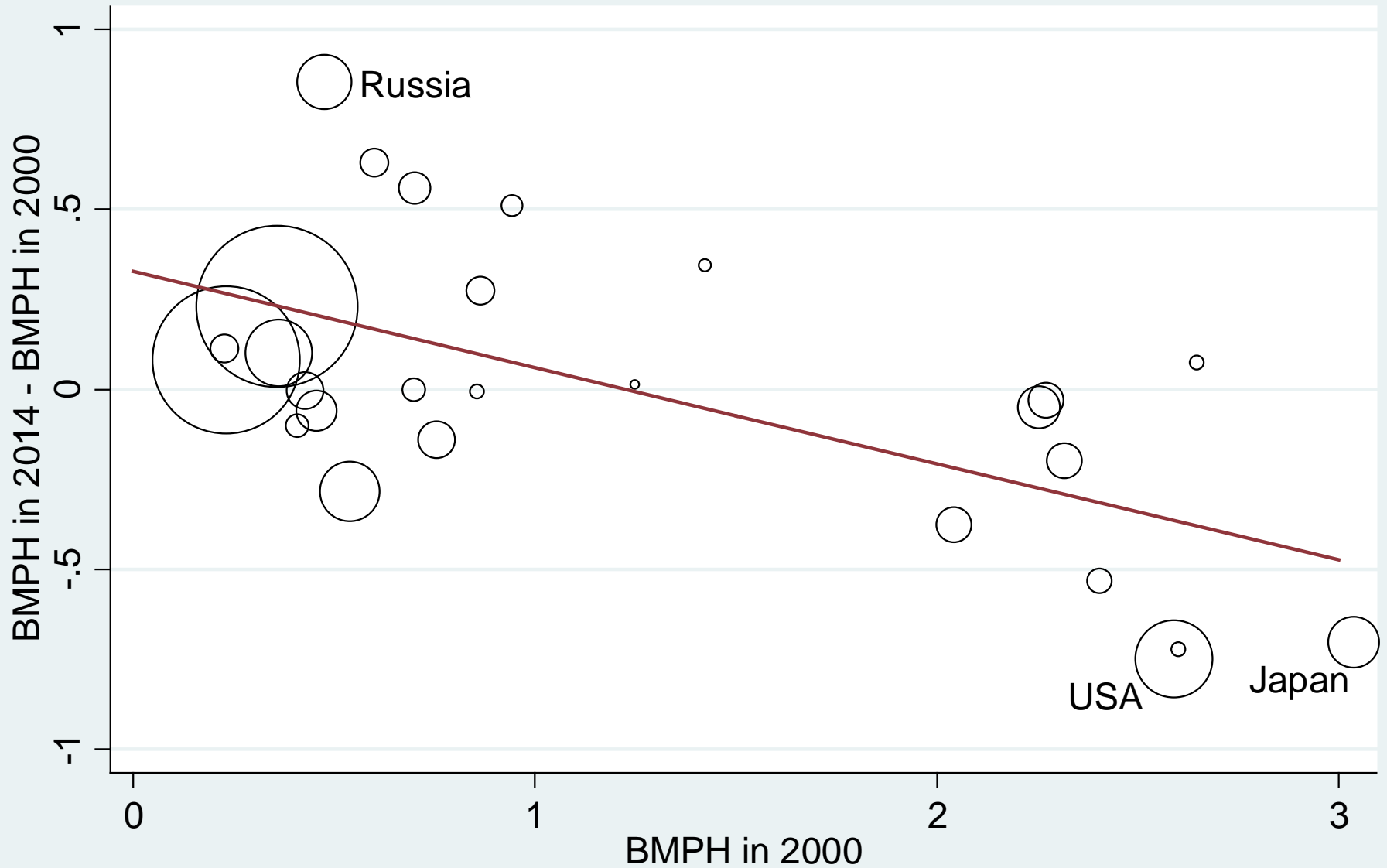
- Yes.  $R^2=0.93$  in the 2011 cross-section (but BMPH available until 2014, unlike PPP wages)
- Most PPP wages higher than wages in Big Macs
- Gap is larger in Argentina or Belarus, but not systematically driven by bouts of inflation
  
- PPP Wages and BMPH also evolve similarly
- 2012/00: Indonesia, Brazil, US among losers, China, India grow in BMPH, not in PPP
- Comparing 2007/00 with 2012/07: China and India ordered the same way in both measures

# McWages vs. Big Mac Prices in 2014



Note: The regression line is from a log linear regression with slope 0.28.  
R-squared = 0.57. The regression is weighted by population; Venezuela is excluded.

# BMPH vs. change in BMPH between 2000 and 2014



R-squared = 0.39. Coeff. of Var of BMPH in 2000 is 0.74, in 2014 it is 0.60