

1

Lecture 1

A menagerie of lines: how to decide who is poor?

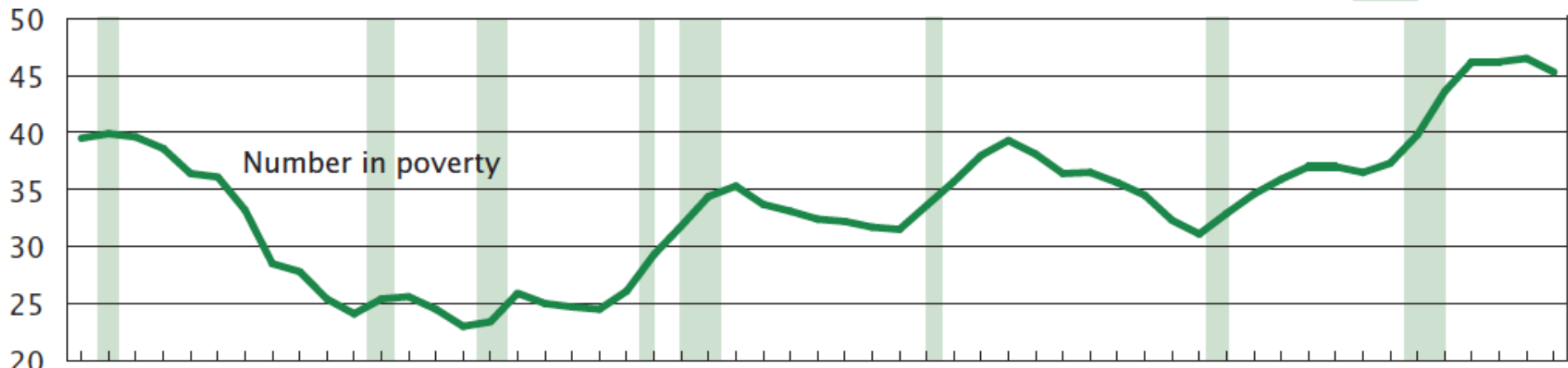
2

USA

Growth with little poverty decline

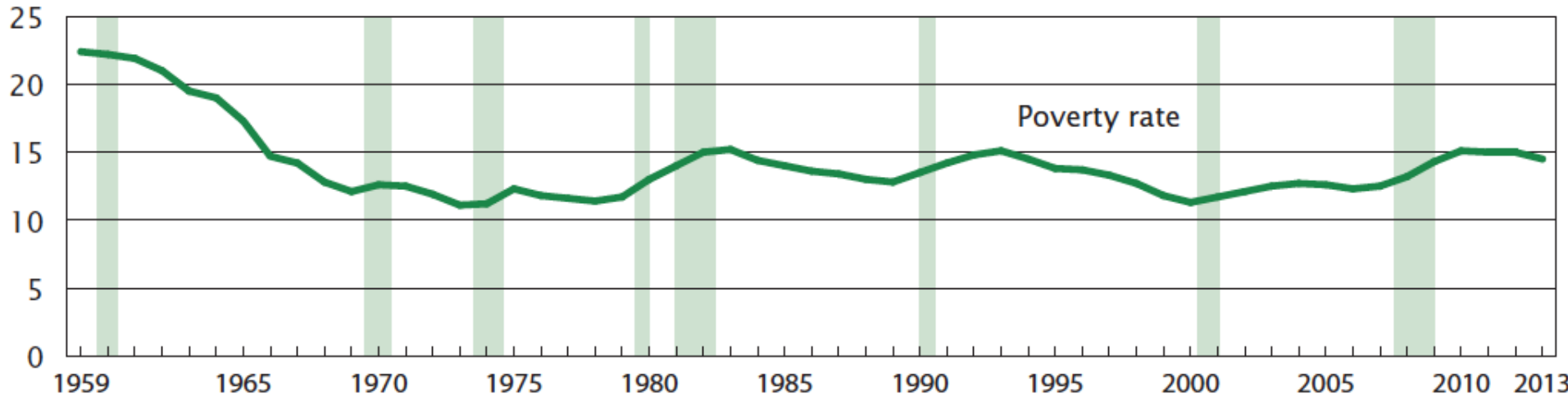
Numbers in millions

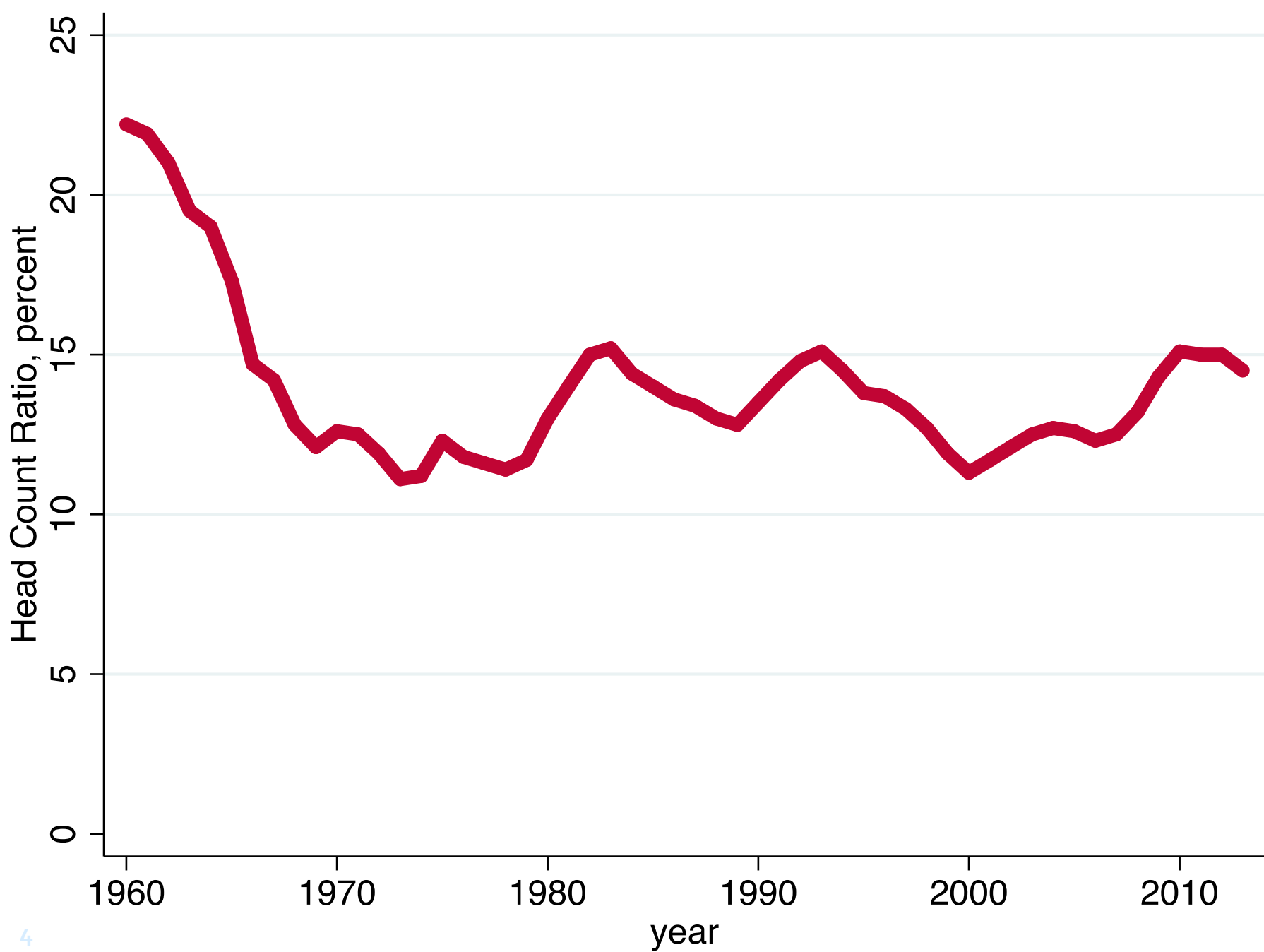
Recession

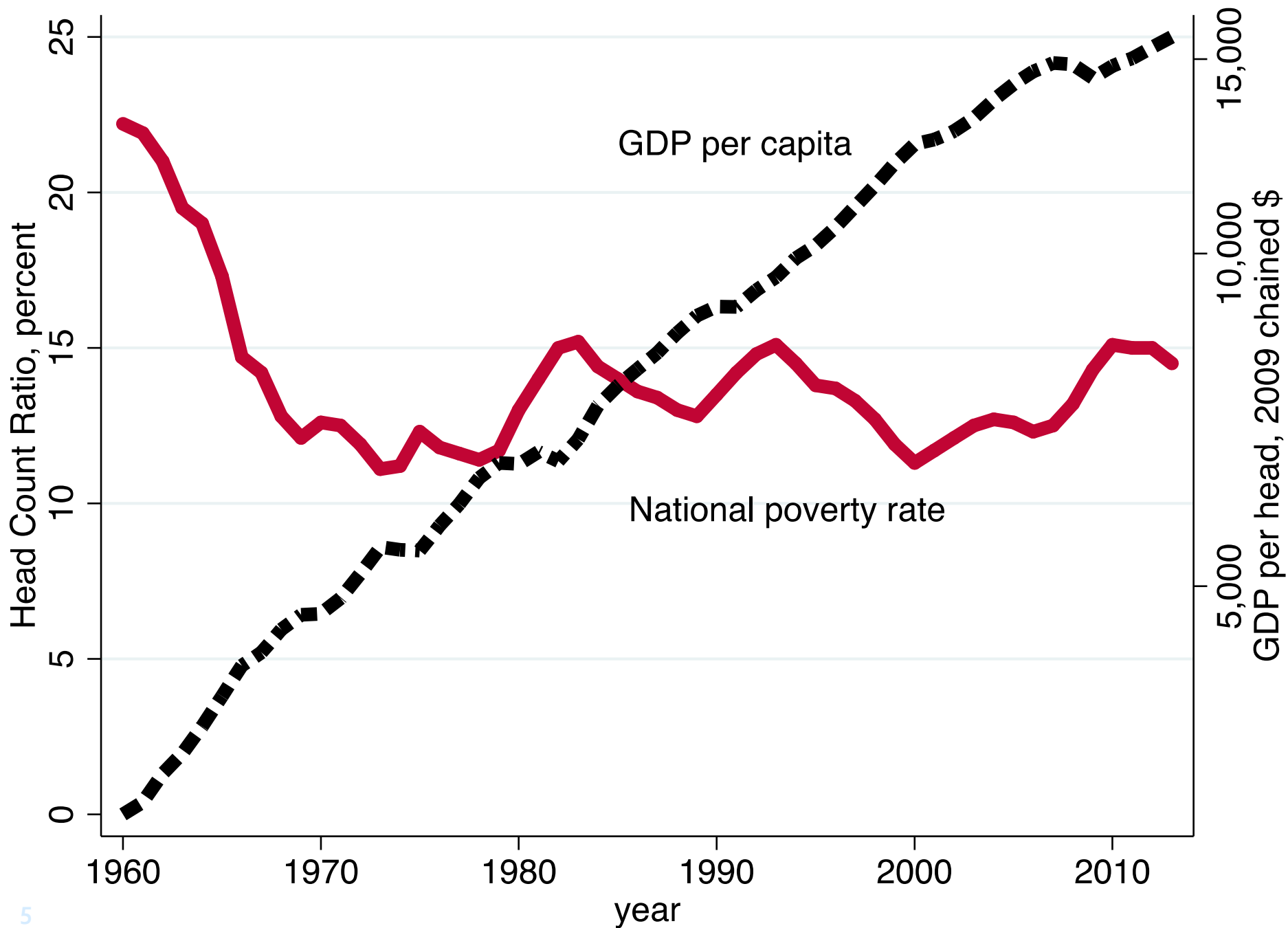


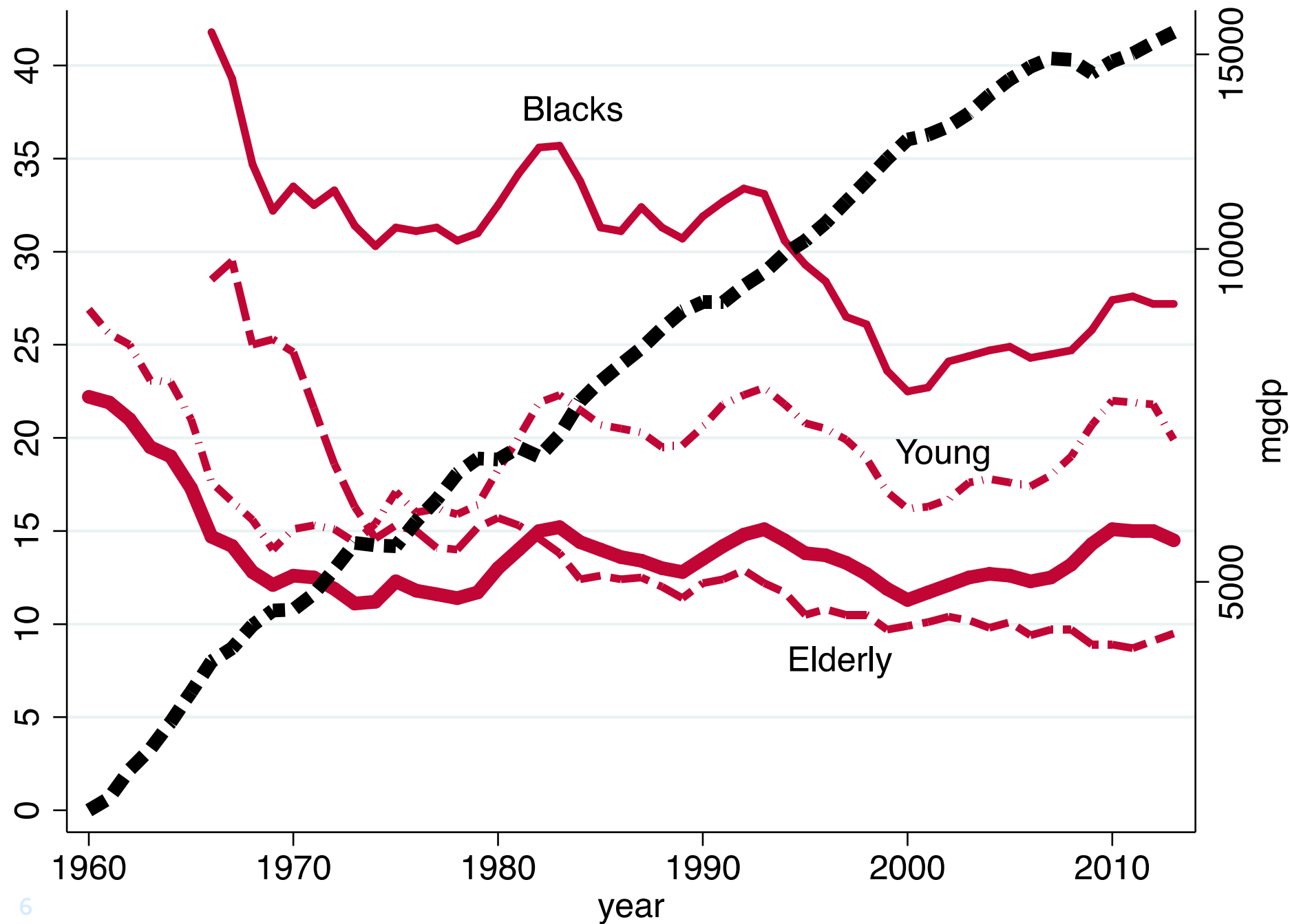
Percent

Poverty rate









Why the discordance?

7

- Inequality widening
 - ▣ Poor are not benefiting from economic growth
 - ▣ Much of which goes to the top of the income distribution
- But not the only thing
- To understand, we need to understand how poverty is measured
 - ▣ And how poverty is connected to per capita GDP
 - ▣ Income that is used to measure poverty is not the same income that goes into GDP
 - Even if we use personal income in national accounts

US Poverty lines

8

- Set in 1963 as the cost of a basic/subsistence food bundle:
 - ▣ Economy Food Plan by USDA in 1961 based on a 1955 survey
- Multiplied by 3 to cover other goods: typical household spent a third of its income on food
- Different poverty lines for different household compositions
- Since then, the line has been updated by the consumer price index
 - ▣ Indexation again, and delegation of political authority
 - ▣ Not the case for the minimum wage, or in other countries for line
- Real PL unchanged in 50 year: was 50 percent of median income in 1963, now around 20th percentile
 - ▣ Line is compared with pre-tax income as the resource measure

Science and nonsense

9

- Construction is weird
 - ▣ Factor of 3 is for a typical, not poor household
 - ▣ To use relevant factor, would need to know PL, circular
 - ▣ CPI updating does not preserve original method: if method was right in 1963, wrong now, if wrong then, why are we using it now? even rhetorically?
- In fact, the method was cooked up to produce a predetermined poverty line
 - ▣ That line was “sensible” and corresponded well to opinion polls at the time about what was needed to “just get by”
- “Science” in the service of providing cover for a sensible, but not easily defended, number
 - ▣ Long term costs in terms of confusion and a muddled debate

Flaws and fixes

10

- Taxes and transfers not important in 1963, excluded from resources
 - ▣ Time bomb laid for the future
- No amount of anti-poverty policy using taxes and transfers can affect poverty: EITC, food stamps, etc.
 - ▣ Much of safety net is non-cash benefits: much harder to handle
- Ronald Reagan (1988) “my friends, some years ago, the Federal Government declared war on poverty and poverty won”
 - ▣ Similar remarks today on 50th anniversary of “war on poverty”
 - ▣ “Our poverty statistics failed us and made it easy to claim that public spending on the poor had no effect” (Blank)

Who can change it?

11

- OMB issued a directive to Census Bureau in 1963
 - ▣ To calculate poverty in exactly this way
 - ▣ Not the usual statistical procedure: no discretion
- OMB responsibility: White House would have to change line
 - ▣ Close to impossible: compared with statistical office doing it itself
 - ▣ More poor of some kinds, or some previously poor no longer poor: both have political risks
- UK price index could not be rebased from 1914 to 1947 (Rebecca Searle)
 - ▣ War cabinet meetings to discuss the price of hake
 - ▣ Stop the war, and bring on the fish
 - ▣ Costing government millions to stabilize a price index that no one believed

Daily Mirror, July 1946

12

- The Edwardian working man, with his billy-cock hat, clay pipe and choker; the Edwardian working-class housewife, badly dressed, badly educated—these people are still supposed to be representative of at least 2,500,000 wage-earners in this country today.
- You may earn £500 a year, own a small car, cut quite a social figure in the neighbourhood, but if your wages are controlled by the Cost of Living Index then your needs, tastes, ambitions, hobbies are roughly classed as those of a coal-heaver of 1904.

Possible reforms

13

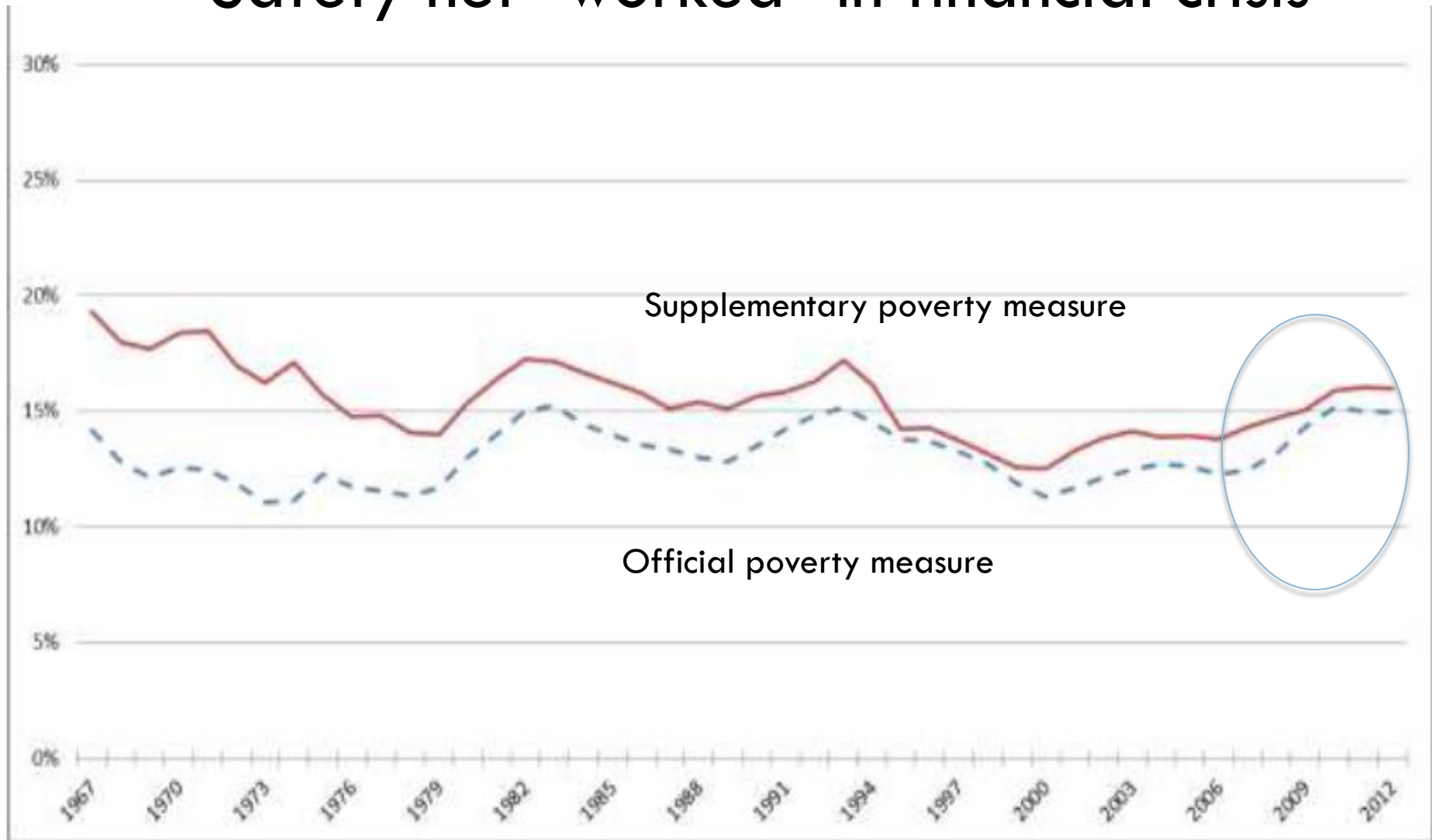
- National Academy panel (“Expert group”) reported in 1995
 - ▣ Financed by Congress to recommend improvements
 - ▣ Many improvements, some straightforward and non-controversial, some controversial, like treatment of medical expenses, geographical price adjustment
 - ▣ In spite of many attempts, no reform today
- Becky Blank one of those who tried
 - ▣ She was on the panel, and Assistant Secretary of Commerce, in charge of Census Bureau
 - ▣ Claims that was more effective to fund reforms as a statistic, without trying to make it the official poverty line
 - ▣ Political neutralization allows it to function statistically

Census' supplementary measure

14

- Supplementary poverty measure is now regularly produced by Census and is widely used across the political spectrum
 - ▣ Official lines used as benefit tests
 - ▣ Workarounds: eligibility is typically defined in relation to federal line, e.g. 133 percent for Medicaid, 4x for Obamacare, SNAP 130 percent
 - ▣ Can be adjusted and states can set their own for some benefits.
 - ▣ Loose connection between entitlements and lines.
- Official count gives some sense of what poverty would be without government assistance
- Supplementary measure is widely used to discuss what happened during the Great Recession

Safety net “worked” in financial crisis



From Fox, Garfinkel et al, 2013

Why has poverty declined so little?

16

- Income used in calculating poverty has risen much less rapidly than GDP per capita
- Increasing income inequality in part
- Definitional differences: many things in national income that are not in household incomes
 - ▣ One important item is government expenditure on healthcare
 - ▣ Assigned to personal income and consumption
 - ▣ Major source of growth in GDP per capita
- Poor people benefit from improving healthcare and it is has become relatively more expensive over time
 - ▣ Medicaid for the poor, cross-subsidization of those who cannot pay
- Should it be included in the measure of resources?

Including healthcare costs

17

- Including in kind transfers, and especially health, makes poverty decline much sharper, and moderates rise in inequality
 - ▣ Increases rate of increase in median wages
 - ▣ Burkhauser: for 1979 to 2007, including all transfers and value of health insurance changes a pre-tax, pre-transfer decrease in real income for bottom quintile of 33 percent to a 26.4 percent increase
- But these are not “near-cash”
 - ▣ Inexorable increase in healthcare costs contributing to the slow or negative wage growth for many people
 - ▣ Only *some* would have been freely chosen
 - ▣ But we can’t force people to buy something that they don’t want and that is sending them into poverty and simultaneously credit them with the costs
- Sharply divisive political issue
 - ▣ Choosing different *definitions* of income will suit different interests

18

India

Rapid growth, but slower than warranted
poverty decline

India

19

- Historically unprecedented economic growth over last 30 years
 - ▣ Now a (lower) middle-income country
- Household final consumption has grown at 3.5 percent a year from 1980 to 2014
 - ▣ At 5.0 percent a year since 2000
 - ▣ Some reduction of growth in last two years
- Rapidly expanding middle class who see themselves as successful global consumers
- Successful and politically powerful business interests

India is poor, too

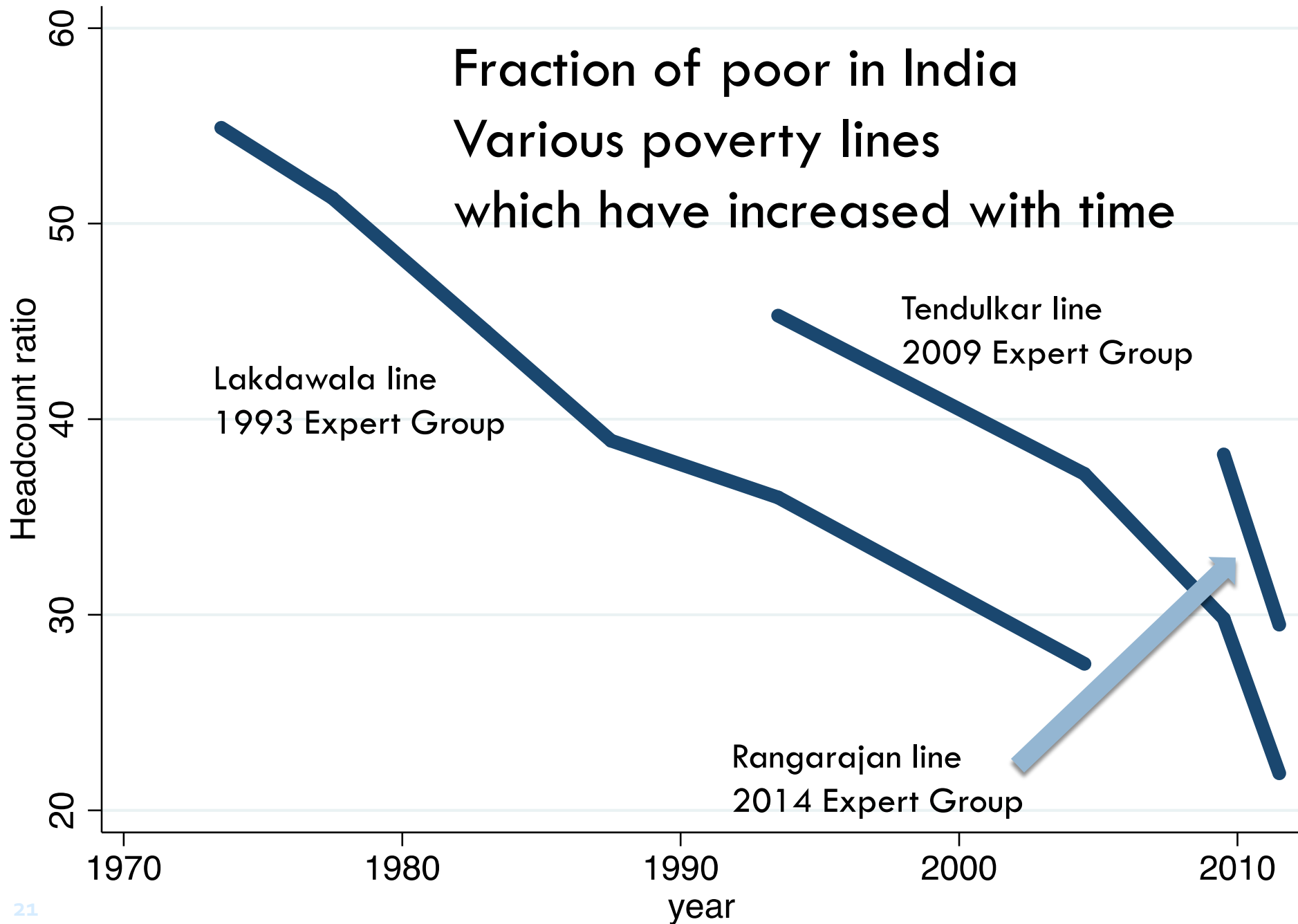
20

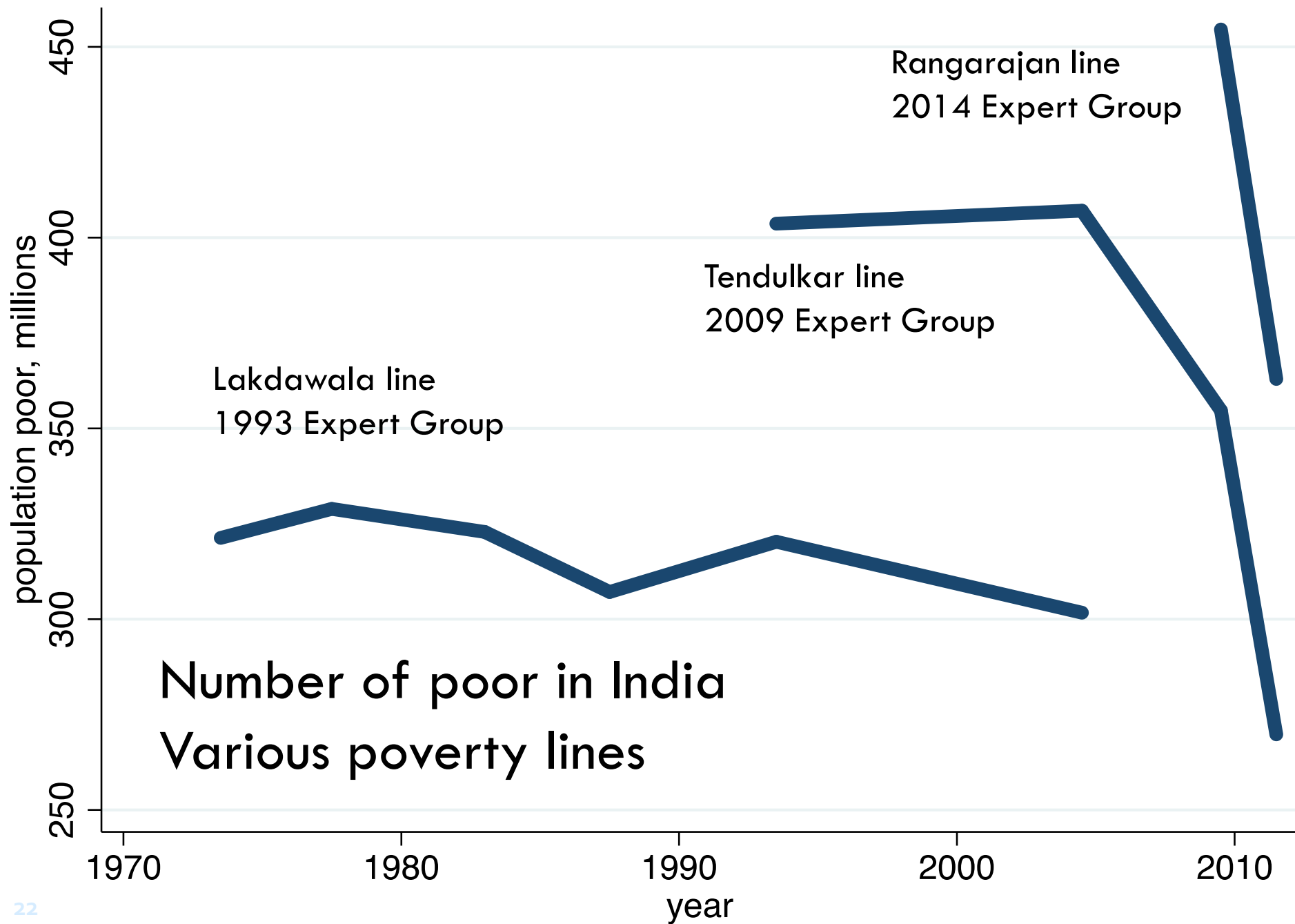
- Yet India has around 300 million poor living at or below destitution standards, about a quarter of the population
 - ▣ Half of India's children are severely malnourished
 - ▣ Indian men and women are among the shortest on the planet: at current rates of change it will take 250 years for Indian women to grow as tall as British women

Fraction of poor in India

Various poverty lines

which have increased with time





Poverty decline and growth

23

- Poverty rate has declined no matter what measure we use, though much more slowly than GDP or aggregate consumption growth would seem to warrant
- Growth comes from National Accounts, poverty from household surveys
- In 1972-3 survey consumption 5% less than NAS consumption
- In 1983-4, 25% less, currently 50% less
- Which is why poverty decline is less than we would expect from the growth of GDP
- Inconsistency is at the heart of the political and statistical debates about poverty in India
- Some increase in inequality too, but less important than gross and increasing inconsistency between NAS and surveys

Background politics

24

- Political problem of how to run an economy that is doing so well for some, while continuing to hold so many poor, malnourished people
- BJP is a religious and business oriented party, Congress is business oriented party with a pro-poor rhetoric that sometimes delivered pro-poor policies
- Both are dependent on rapid economic growth for legitimacy
 - ▣ Important, politically, that growth not only take place, but be seen to help the poor
 - ▣ Either through direct schemes (left) or rising tide and boats (right)
- Political divide, as elsewhere, whether growth should have priority
 - ▣ One extreme that growth is sufficient as well as necessary
 - ▣ Other extreme growth causes poverty, by redistributing upward
 - ▣ Middle worries about ineffectiveness of pro-poor policies

Poverty and politics

25

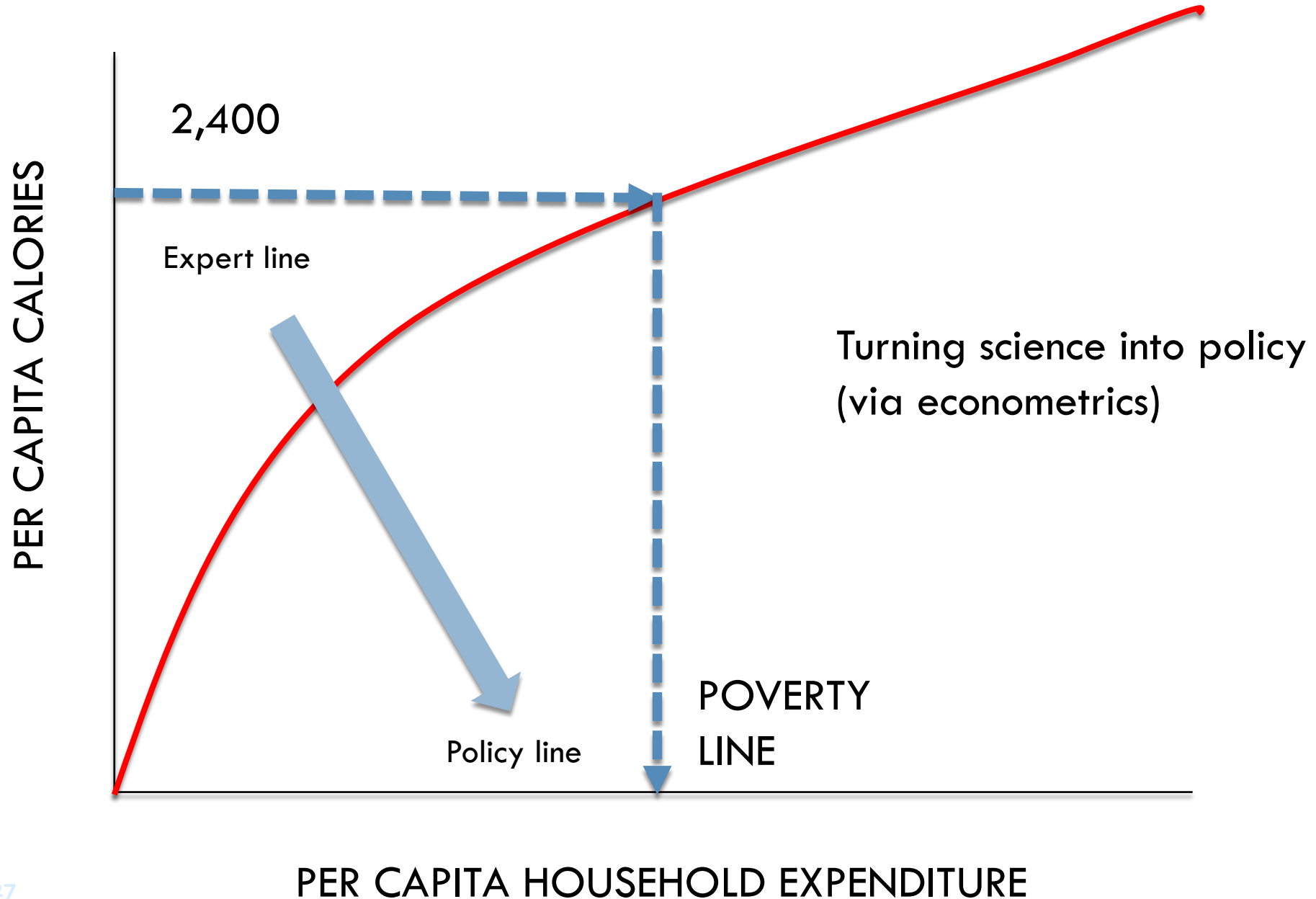
- For many, the existence of so much poverty is an embarrassment
 - ▣ The poor are globally destitute, financially and physically
 - ▣ Surely this cannot be true?
- Within this framework, how does poverty get measured?
- Note that the results are used to allocate the food distribution system by states, so that they do matter
 - ▣ They are NOT used to identify individuals for access to subsidies (BPL cards)

History of measurement

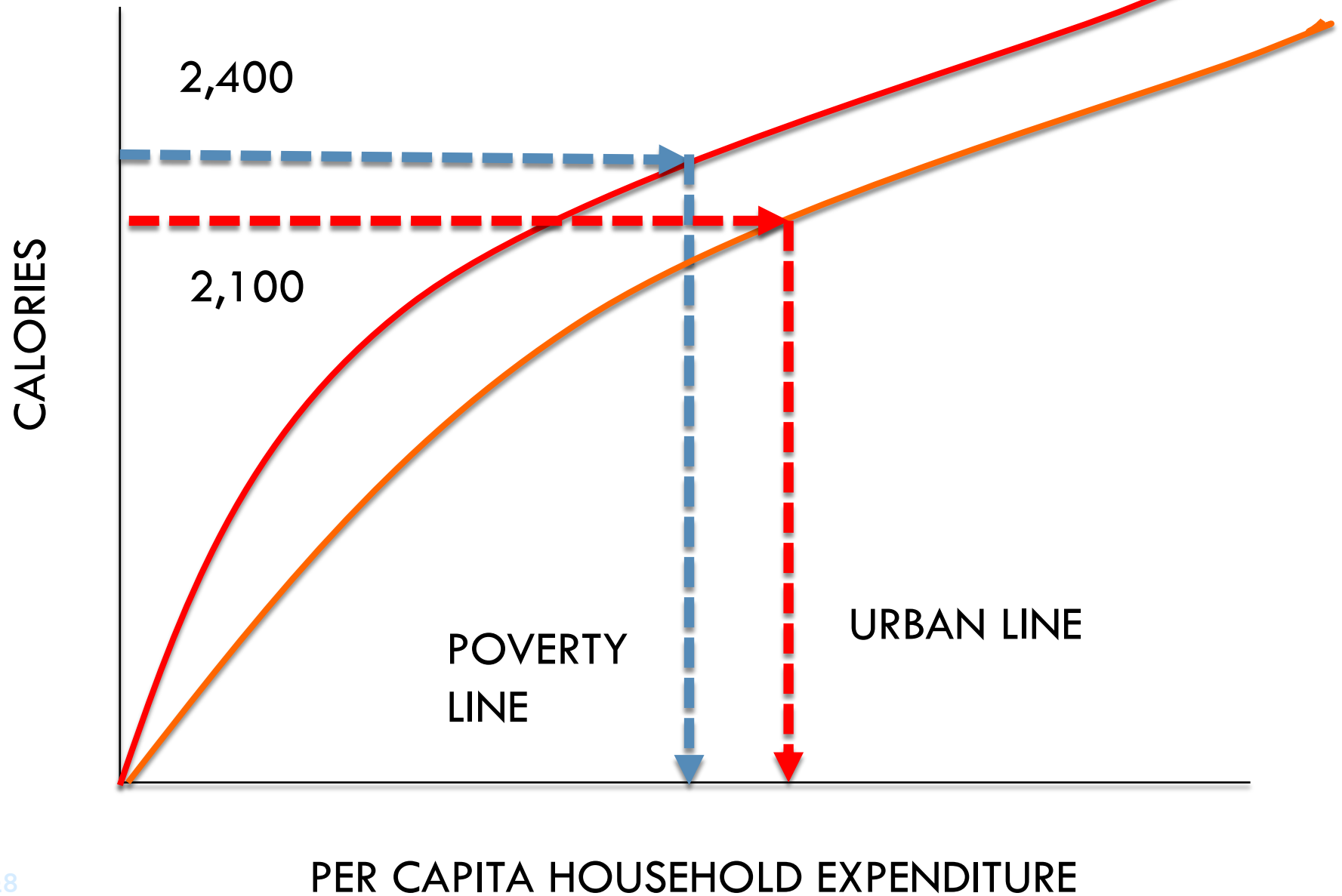
26

- Planning Commission has been creator and keeper of poverty statistics:
 - ▣ PC an important agency, even as planning faded
 - ▣ PM is chair, Deputy Chair status similar to Finance Minister
 - ▣ Its abolition was announced by PM Modi in August
 - ▣ Future of poverty measurement is unclear
- In 60s and 70s, PC used two lines, one urban one rural. Probably with some reference to calories
 - ▣ Parallel with the US
- Task force in 1977 formalized with reference to calories required for various activities: 2,400 rural and 2,100 urban
 - ▣ PL is household per capita expenditure level at which, on average, those calories are met

SETTING THE LINE FROM A CALORIE NORM



URBAN AND RURAL LINES



Plausibility?

29

- Food basis of these lines enhances their political acceptance
- But many problems
 - ▣ Calorie needs vary greatly over individuals
 - ▣ Minimum calorie norms can be met at *much* lower cost through unpalatable diets, as fed to animals
 - Original linear programming problem
 - Offensive, but so is the original formulation of the problem
 - People are not work animals or machines

Urban versus rural

30

- Urban line justified by higher cost of living in urban areas
 - ▣ But this is nowhere explicitly incorporated
 - ▣ Perhaps the lower curve is because of higher costs, or needs for expensive housing or transport, but it is nowhere formalized
- If separate lines for urban and rural, why not for different states?
 - ▣ India is a big country, and (say) Kerala, Punjab, and West Bengal are very different
 - ▣ Because the method gives silly results for some states

Statistical errors and politics

31

- Serious conflict between NAS and NSS consumption figures
- Original practice had been to inflate NSS to NAS totals:
 - ▣ Poverty was previously guaranteed to fall at the rate warranted by GDP growth, at least if no inequality increase in NSS, which was slight if at all
 - ▣ Now the NSS growth was definitive, rate of poverty decline slower
 - ▣ Growth in GDP no longer shows up fully in poverty reduction
- Left says NSS is obviously right, and only complete source of what people actually spend, and poverty is declining slowly
- Right says NAS is obviously right, that surveys are useless, that enumerators sit under trees or in tea-shops filling out questionnaires from nothing
- So in late 90s a campaign to discredit the surveys by the rightists, and, more constructively, to suggest why they might be wrong

Reporting periods

32

- The following illustrates a perfect example of how politics penetrates deeply into measurement
- How much rice did you buy over the last XX days?
 - ▣ Indian tradition, from Mahalanobis, was $XX=30$, based on an experiment
 - ▣ In the debate, right argued this was too long, other statistical offices use 7 days, and that people would forget over 30
 - ▣ This might explain some of the gap between NAS and NSS
 - Though not clear that it can say anything about why that gap increases over time, which is the key issue
- One side wanted 7 days, other 30 days, unresolvable
- How to decide? Do a randomized controlled trial, of course!

The reporting period debacle

33

- Surveyors did a nationwide RCT, randomizing 7 and 30 over villages
- RCT showed, indeed, that flow of reported consumption at 7 days was higher than flow at 30 days
 - ▣ Triumph for the right, or was it?
- The effect is HUGE: 175 million Indians were removed from poverty in 1998, close to a half
 - ▣ This is more than ten percent of WORLD poverty
- But this didn't resolve anything: as always RCTs do not tell us WHY the difference occurred, or which was correct
 - ▣ But they did raise the stakes in the debate, because there was a lot to fight over

Disastrous resolution

34

- Again, the debate was unresolvable, neither side would concede, so a compromise: do both at once!
 - ▣ This was a disaster, because they cross-contaminated, and the poverty measurement process in India was compromised for a decade, because the major poverty surveys are only done every five years or so
- In the end, yet another Expert Group, which complicated things even more, and has, until recently, been the basis for counts

Things fall apart: exposing cracks

35

- Remarkable decline in per capita calorie (& protein) consumption in India
 - ▣ In spite of mass malnutrition in anthropometrics
 - ▣ In spite of real income & consumption growth, even among the poor, and even according to the surveys
- Happening at *all* levels of consumption, though more among the rich than the poor

Calorie puzzles

36

- Why this is happening remains unclear and deeply controversial
 - ▣ People are being impoverished by neoliberal globalization, CPI(M)
 - ▣ More likely is a sign of progress. Rising real incomes reduce hard labor, as well as better sanitation
- NB Across areas of India, it is the healthier, richer places, in the South that have lower calorie consumption per capita than do the less healthy poorer places in the north

Calorie decline and poverty counts

37

- For the moment, suppose it is a good thing, that hard work is a bad, and will decrease as times get better
- So what does this do to the poverty counts?
- Real income is increasing, so poverty declines
 - ▣ Correct if the decline is being driven by a better world
- Calorie consumption is falling, and number below calorie lines is rising
- Sowing even more confusion and political controversy

Planning Commission and the line

38

- Poverty line itself has lost public credibility
 - ▣ PC sent an infamous affidavit to the Supreme Court saying that 26 Rs per person per day was enough to remove someone being poor
 - ▣ The media widely condemned such an absurdly low number,
 - ▣ As did their (relatively well-heeled) readers
 - ▣ Neglecting that more than 250 million Indians lived below it

From baroque to rococo

39

- Indian and Western press converted rate at market exchange rate to get 30 cents and then claiming that the rate was much lower even than the line used by the (wicked) World Bank
 - ▣ Forgetting that WB line is denominated in PPP terms and is very similar to the Indian line
- What do do? Set up yet another Expert Group, whose report sets new standards of rococo statistical architecture
- Then the Planning Commission got abolished!

The end of the line?

40

- The standard poverty line based measures in India are now discredited
 - ▣ In part because events discredited its rhetoric
- So that political squabbling over the measure of success was bound to destroy it
- Leaving one side to proclaim success based on GDP growth, there is little poverty left
- And the other to claim destitution through neoliberal globalization

Social constructs

41

- Similar pressures in US in both directions, but worked differently because of the unchangeability of the line
 - ▣ Been there a long time, people are used to it, and can work around it in setting benefits and policy
 - ▣ Functions as a socially agreed tool: not really *the* line, but
- Attempts by last but one EG in India to abandon normative calorie basis were not well received by commentators including academics, and were reversed in latest EG
 - ▣ Yet, they were undoubtedly right that any poverty line is a social construct, not a scientific one
 - ▣ Though perhaps the scientific disguise is needed for it to work as a social construct?
- Both countries like Expert Groups!!

Coda

42

- What about the data on malnourishment?
 - ▣ Half of children are severely malnourished
 - ▣ Indian men and women are among the world's smallest
- Numbers from a 98/99 survey caused consternation
 - ▣ PM Manmohan Singh said they were a national shame
- In recent years, senior officials note that the figures are out of date
 - ▣ While doing nothing to update them, and new survey has been long delayed

There is no poverty!

43

- In the meantime, some eminent economists have pressed the argument that, like the poverty numbers, these numbers are not a problem
 - ▣ Because Indians are genetically short
 - ▣ To my way of thinking, and understanding of the literature, this is very much an argument of last resort
- Why Indians are so malnourished is a key area on which to focus,
 - ▣ new work on open defecation (Dean Spears et al)
- If poverty is such an embarrassment, or shame
 - ▣ Deny it!
 - ▣ Growth triumphalism and poverty denialism