

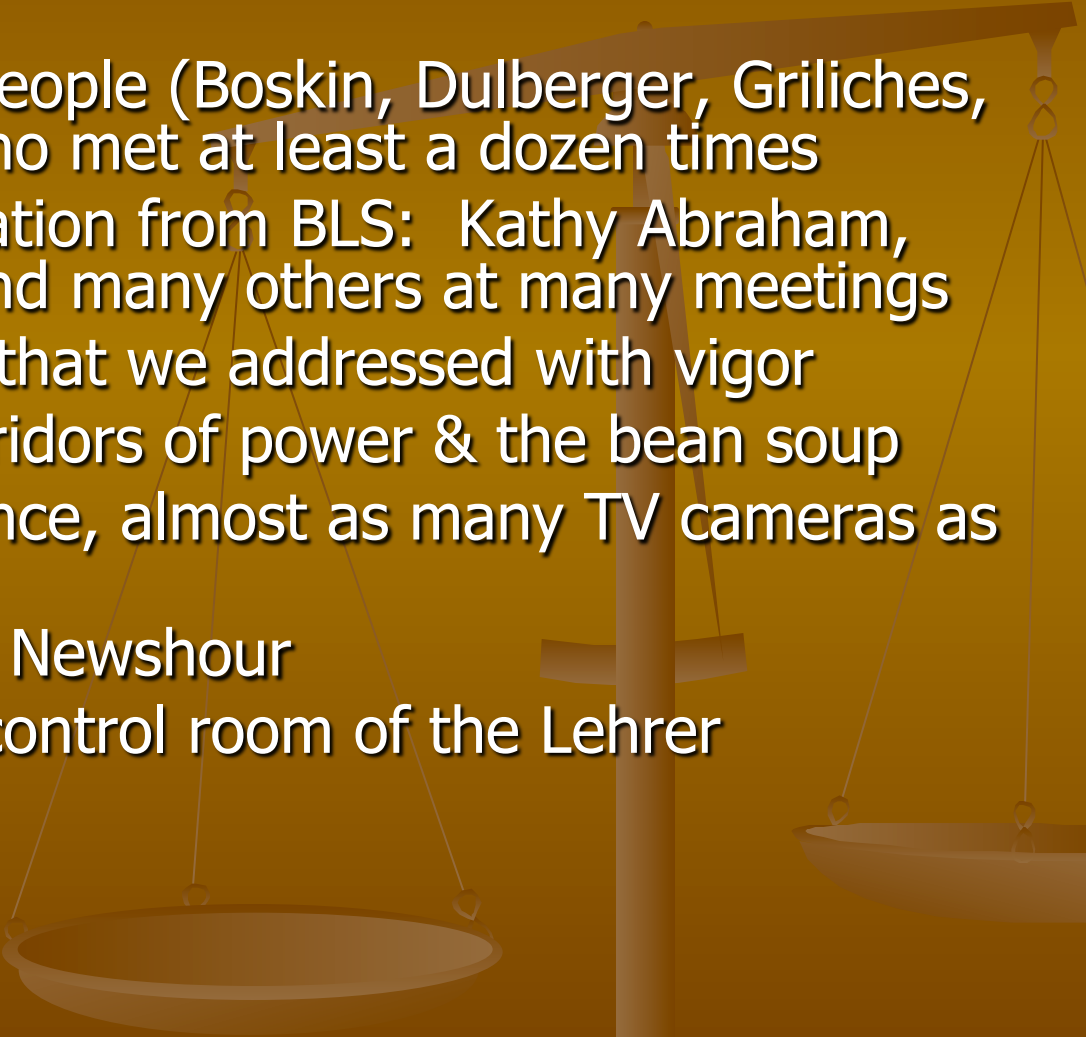


The Boskin Commission One Decade Later

Robert J. Gordon
Northwestern University and NBER
AEA Meetings, Boston MA,
January 7, 2006

I' m Here as the Boskin Surrogate

■ Nostalgia

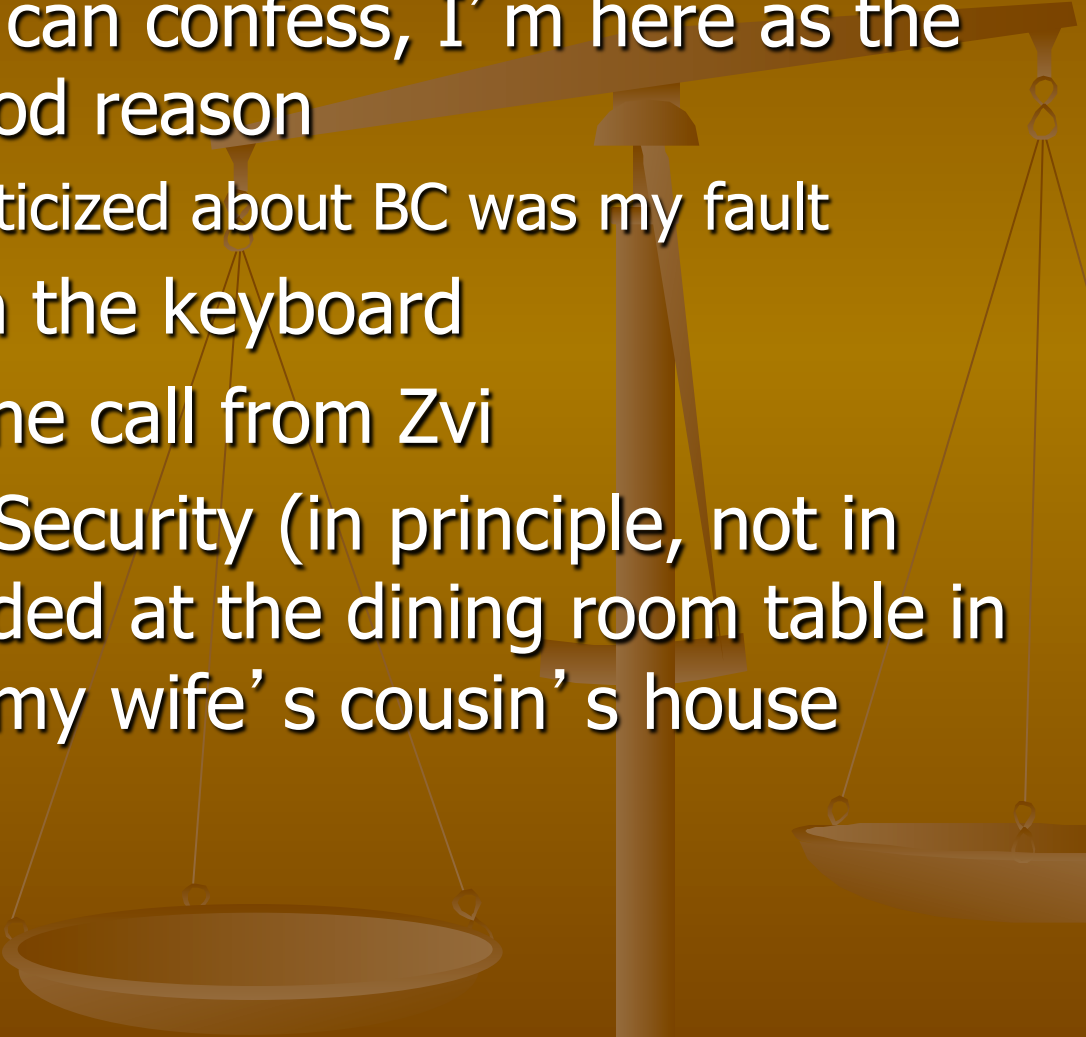
- A great group of people (Boskin, Dulberger, Griliches, and Jorgenson) who met at least a dozen times
 - Wonderful cooperation from BLS: Kathy Abraham, John Greenlees, and many others at many meetings
 - Challenging Topic that we addressed with vigor
 - Moynihan, the corridors of power & the bean soup
 - The press conference, almost as many TV cameras as Alan Greenspan
 - Live on the Lehrer Newshour
 - Better yet, in the control room of the Lehrer Newshour
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Why So Much Publicity

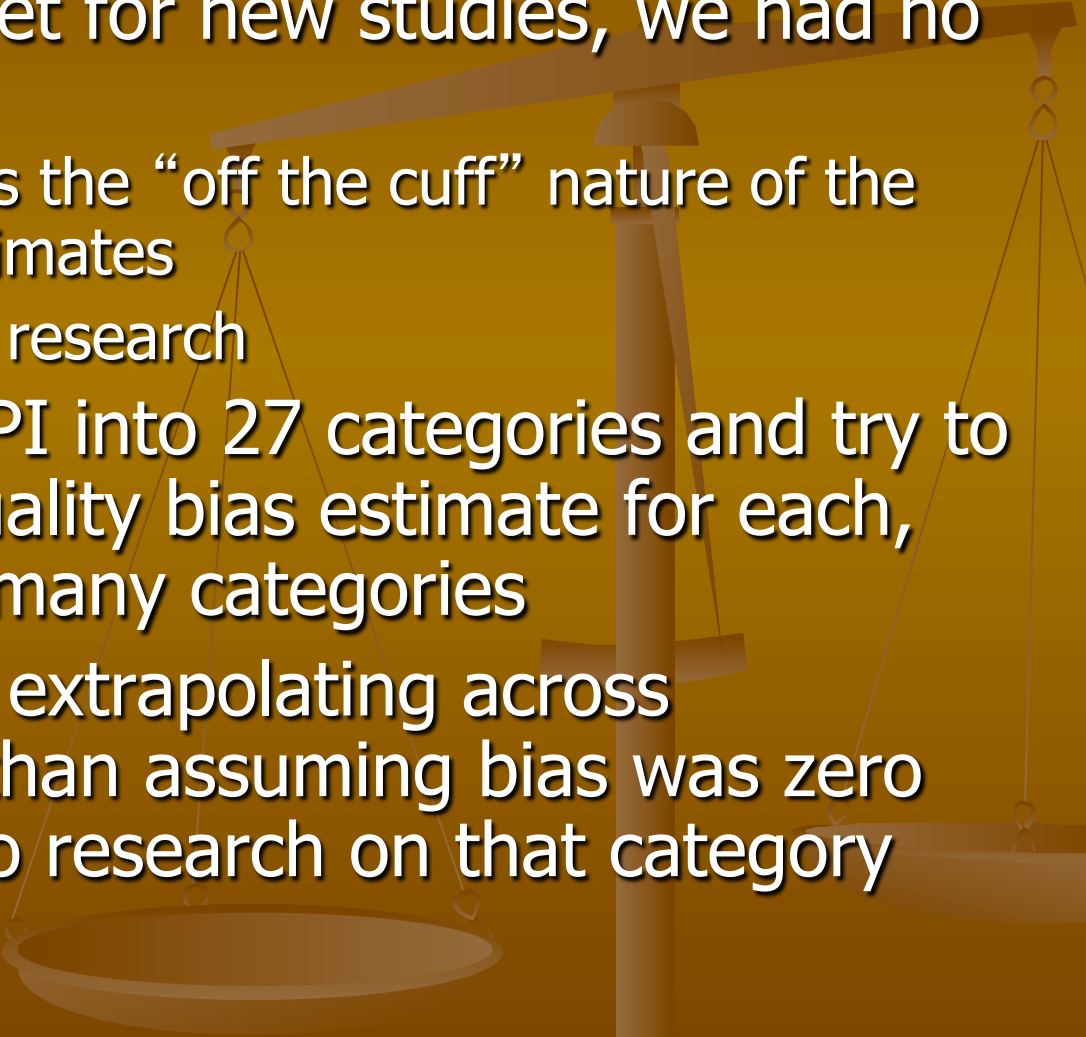


- BC tried to do two things at once
 - #1 assess the CPI bias
 - #2 urge a “bias correction” for Social Security indexation, the “CPI minus X” approach
- Set off a storm of controversy over both #1 and #2
 - #1, BLS and others defended their methods and criticized some aspects of the BC report
 - #2 launched a kill-campaign by the AARP
 - Moynihan: “Oh, we came so very close!”

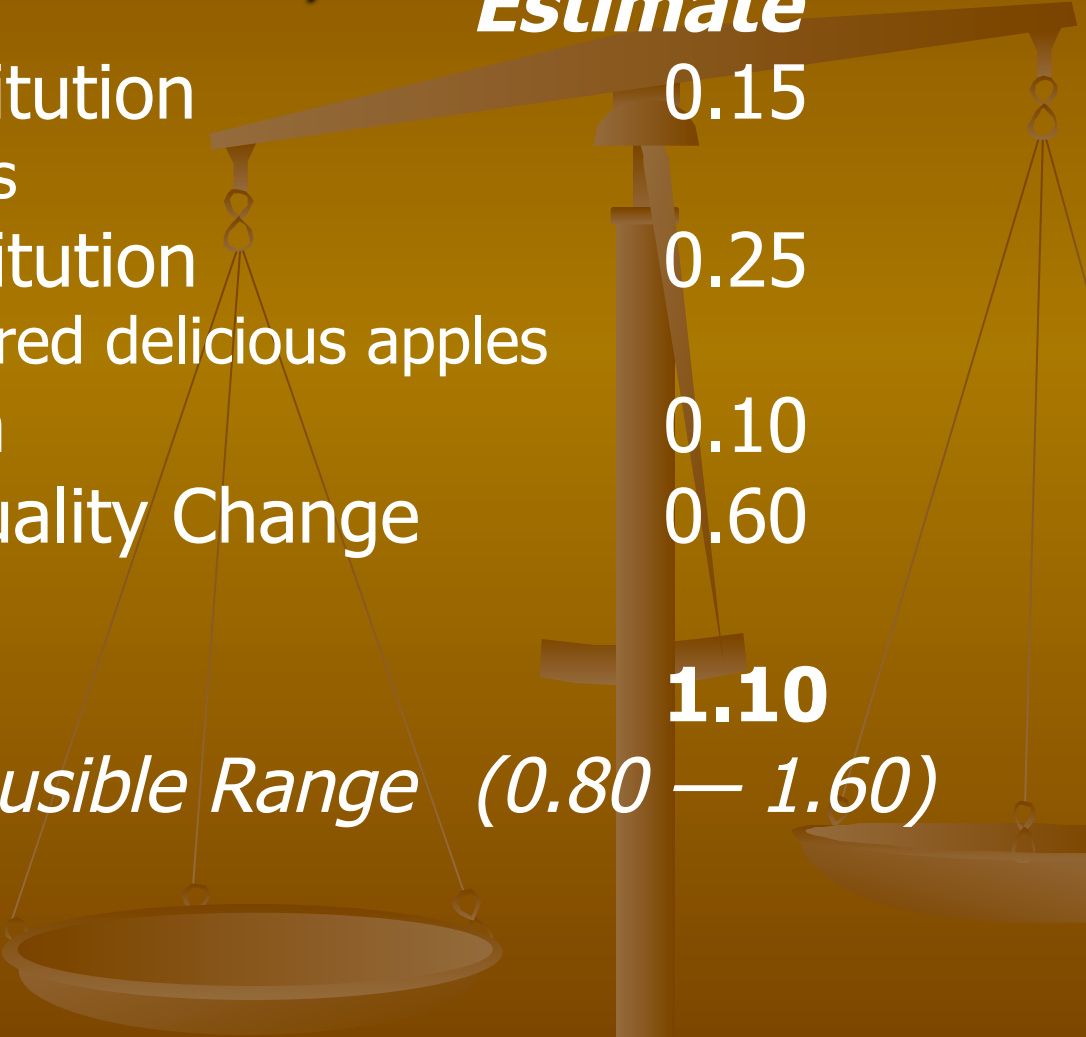
Let me Take You Behind the Scenes

- Nine years later, I can confess, I'm here as the surrogate for a good reason
 - Most of what is criticized about BC was my fault
 - Fingers slipping on the keyboard
 - The two-hour phone call from Zvi
 - The fate of Social Security (in principle, not in practice) was decided at the dining room table in Jacksonville FL at my wife's cousin's house
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Differences with the 1961 Stigler Report

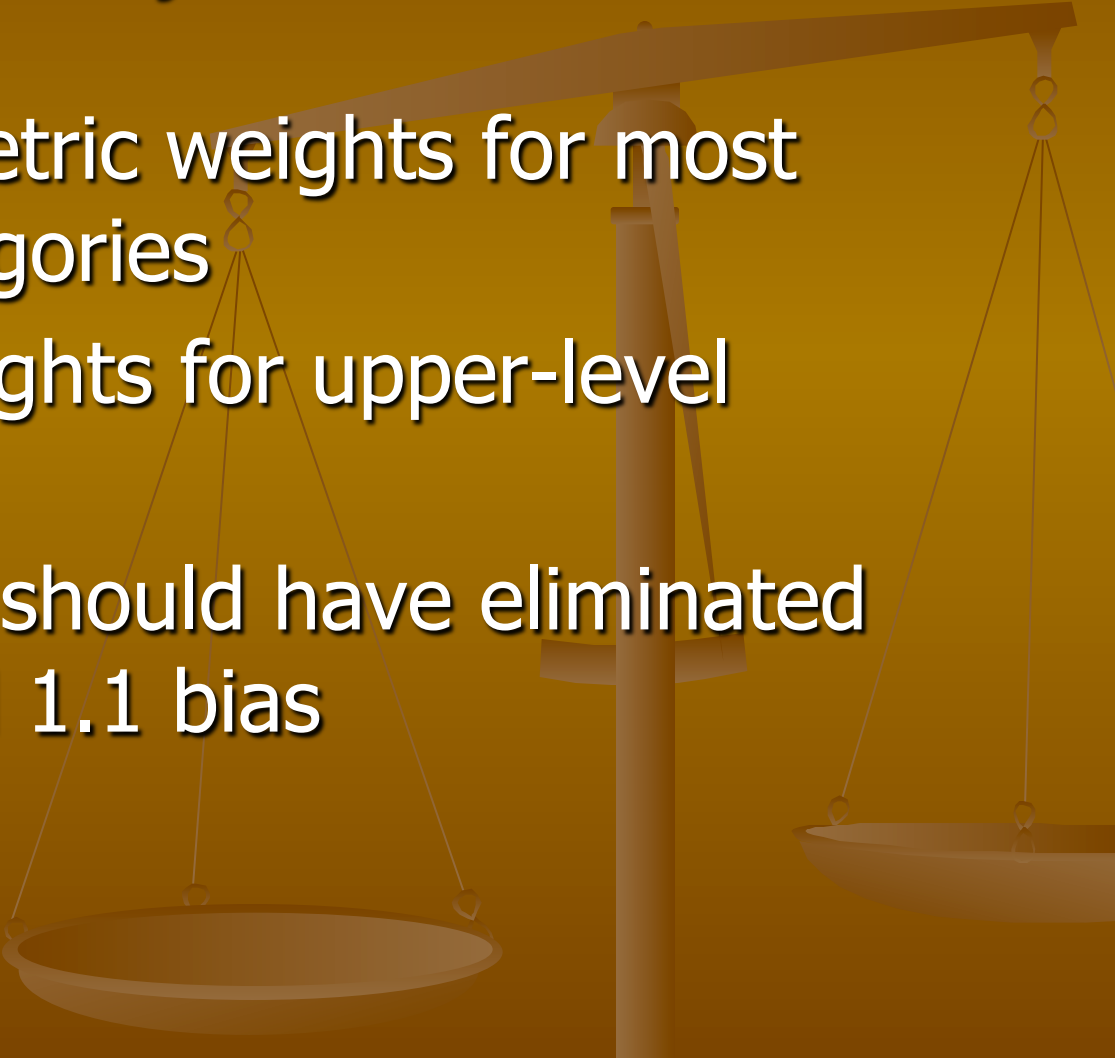
- Stigler had a budget for new studies, we had no budget at all
 - This partly explains the “off the cuff” nature of the quality change estimates
 - A survey, not new research
 - Novelty: Divide CPI into 27 categories and try to come up with a quality bias estimate for each, including zero for many categories
 - Overriding issue – extrapolating across categories rather than assuming bias was zero when there was no research on that category
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About #1, The BC Conclusions about the Bias (in Percentage Points)



<i>Source of Bias</i>	<i>Estimate</i>
■ Upper Level Substitution <ul style="list-style-type: none">■ Apples vs. bananas	0.15
■ Lower Level Substitution <ul style="list-style-type: none">■ Golden apples vs. red delicious apples	0.25
■ Outlet Substitution	0.10
■ New Products / Quality Change	0.60
■ Total	1.10
<i>Plausible Range (0.80 — 1.60)</i>	

About Substitution Bias: CPI Immediate Fix in 1999, Previously Planned

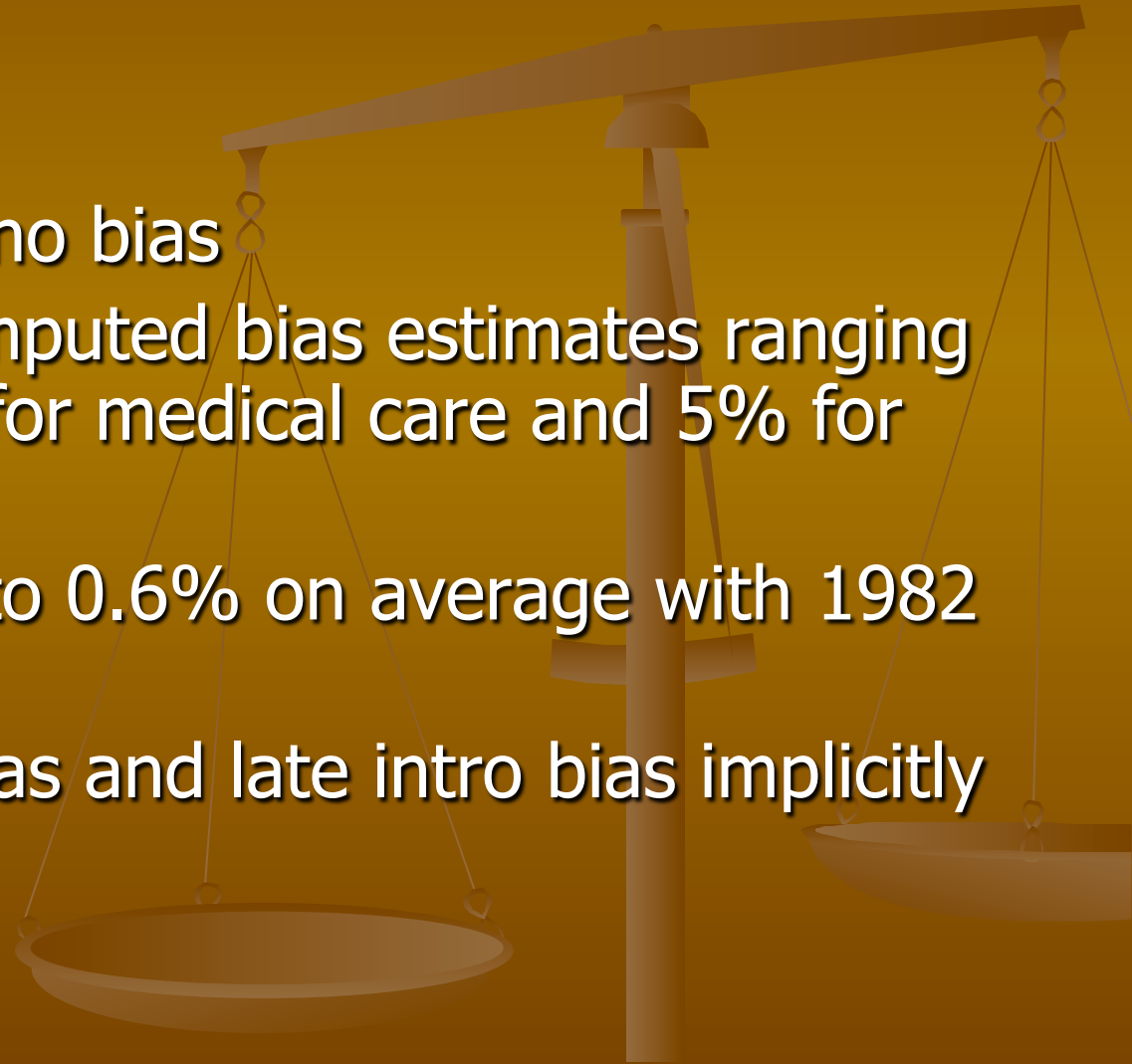
- Switch to geometric weights for most lower-level categories
 - Retain fixed weights for upper-level categories
 - In principle this should have eliminated 0.25 of the total 1.1 bias
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Outlet Substitution: the “Walmart Effect”

- New forms of retailing have been invented going way back to the Sears catalog vs. the rural general store
- In our period (1995-96) there was a rapid shift toward discount merchants
 - Side Comment: this is the same phenomenon of “big box” retailing that has caused U. S. productivity growth to sprint ahead of Europe’s
 - Martin Baily is the expert on the productivity and price effects of big box retailing.
- Linked out by CPI

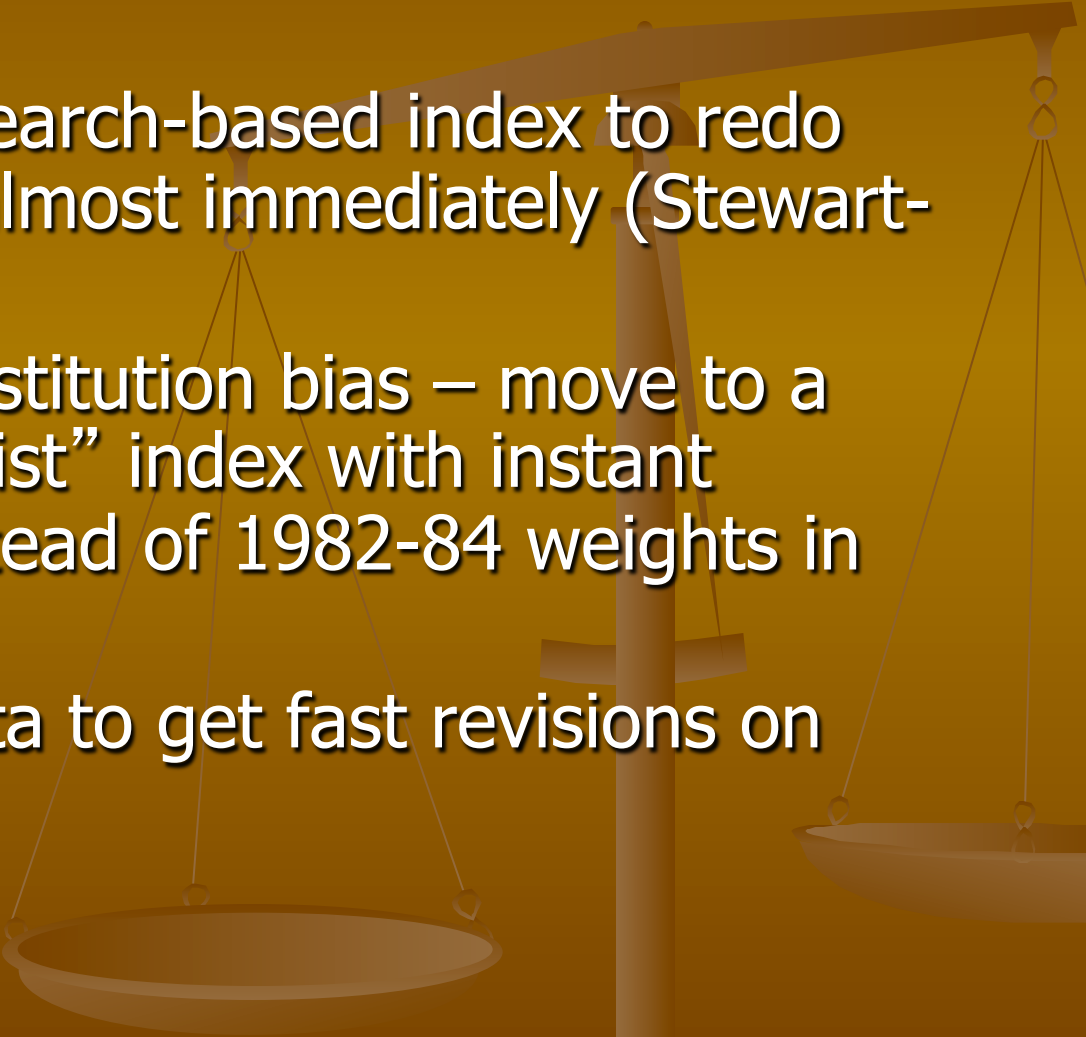
Quality Change and New Products, the Controversial Part

- 27 categories
 - 8 we assumed no bias
 - Other 19, we imputed bias estimates ranging as high as 3% for medical care and 5% for electronics
 - This came out to 0.6% on average with 1982 weights
 - New product bias and late intro bias implicitly included

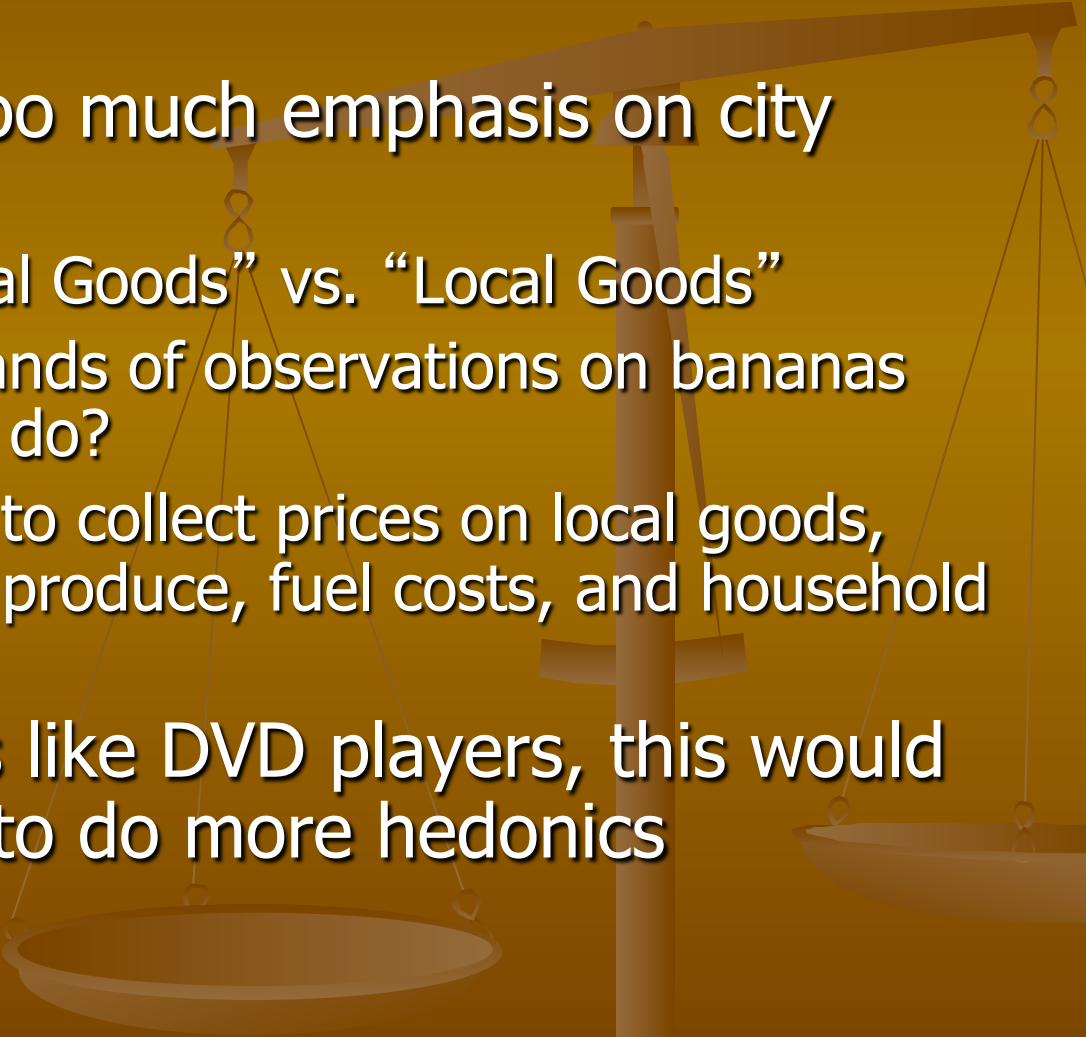


Our recommendations

■ Short-term

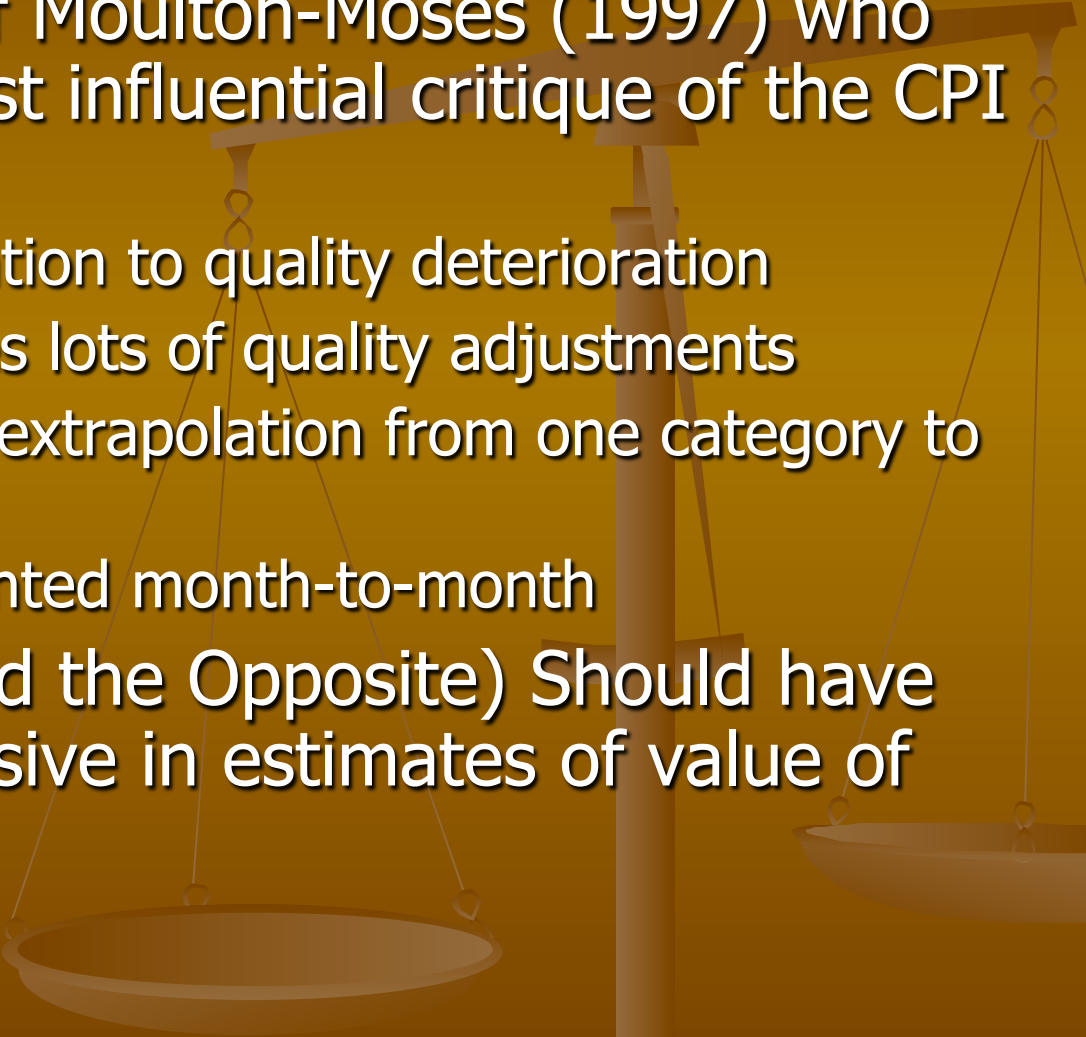
- Introduce a research-based index to redo history. Done almost immediately (Stewart-Reed).
 - Upper-level substitution bias – move to a “trailing Tornqvist” index with instant reweighting instead of 1982-84 weights in 1996
 - Use scanner data to get fast revisions on weights
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No Comment or Response on an Important Recommendation: Misallocation of Data Resources

- Data collection: too much emphasis on city indexes
 - There are “National Goods” vs. “Local Goods”
 - Why collect thousands of observations on bananas when a few would do?
 - Free up resources to collect prices on local goods, i.e., non-imported produce, fuel costs, and household services
 - For national goods like DVD players, this would free up resources to do more hedonics
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Criticism of The Boskin

Recommendations and Approach

- Particular praise of Moulton-Moses (1997) who called BC “the most influential critique of the CPI in decades”
 - No adequate attention to quality deterioration
 - BLS already makes lots of quality adjustments
 - Back of envelope, extrapolation from one category to the next
 - Can't be implemented month-to-month
 - (But others claimed the Opposite) Should have been more aggressive in estimates of value of new products
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Today's 2005 Commission Response

- Shapiro-Wilcox (1996). Our substitution estimates were too low, should be 0.5 not 0.4
- About substitution bias, we will have this persistent difference between CPI vs. PCE, where does this come from?

	CPI	PCE	Difference
1995:1-1998:1	2.35	1.68	0.67
1998:1-2001:1	2.73	2.00	0.73
2001:1-2003:1	2.04	1.70	0.34
2003:1-2005:3	2.92	2.51	0.41

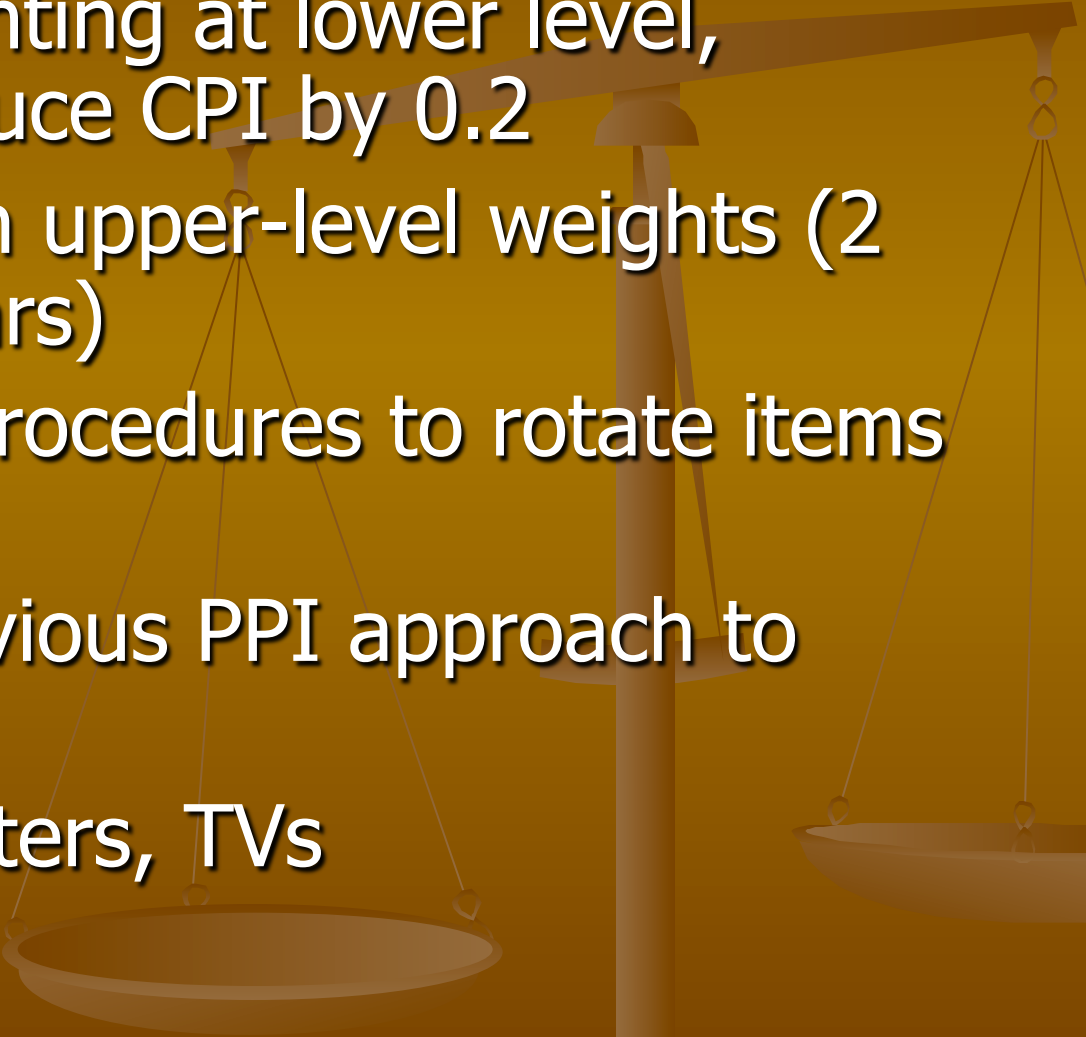
Quality Change: Too Subjective

- But we know a lot even if we don't have evidence, e.g., that the value of the invention of the jet airplane is positive rather than zero (Me: value of invention of air transport = 3% of GDP per year)
 - Would you want to assign a zero value just because there is no formal research?
 - Moulton-Moses: “the overall approach seems to us to be a sensible and useful way to approach the problem of coming up with an overall assessment of bias.”

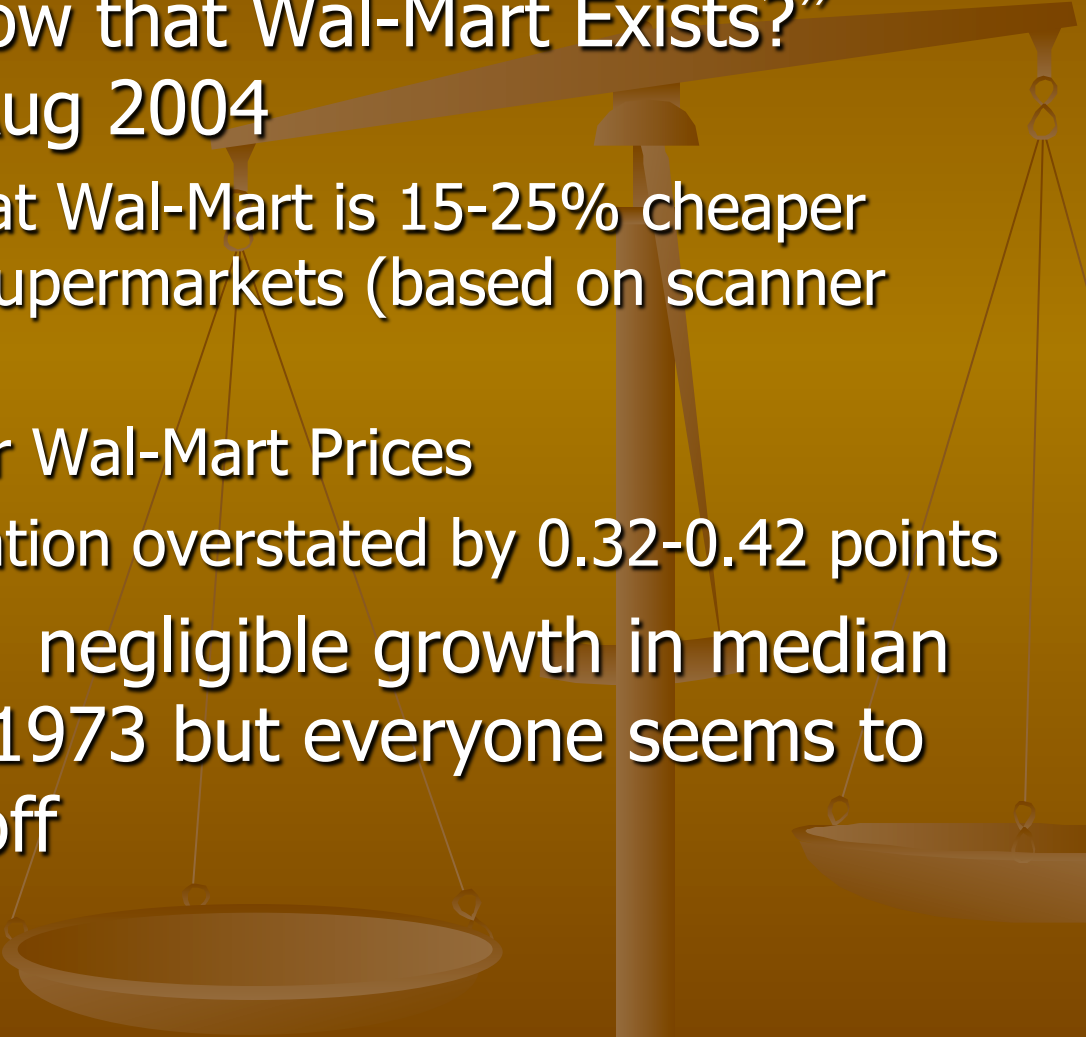
Dimensions of Defense

- The BLS in 1995-96 actually did very little adjustment for quality change, it was mostly linking
- No explicit adjustments for new and improved goods, greater speed, durability, variety, convenience, safety, and energy efficiency
- Some of our estimates were too high, others too low
 - Especially value of new products (Hausman)

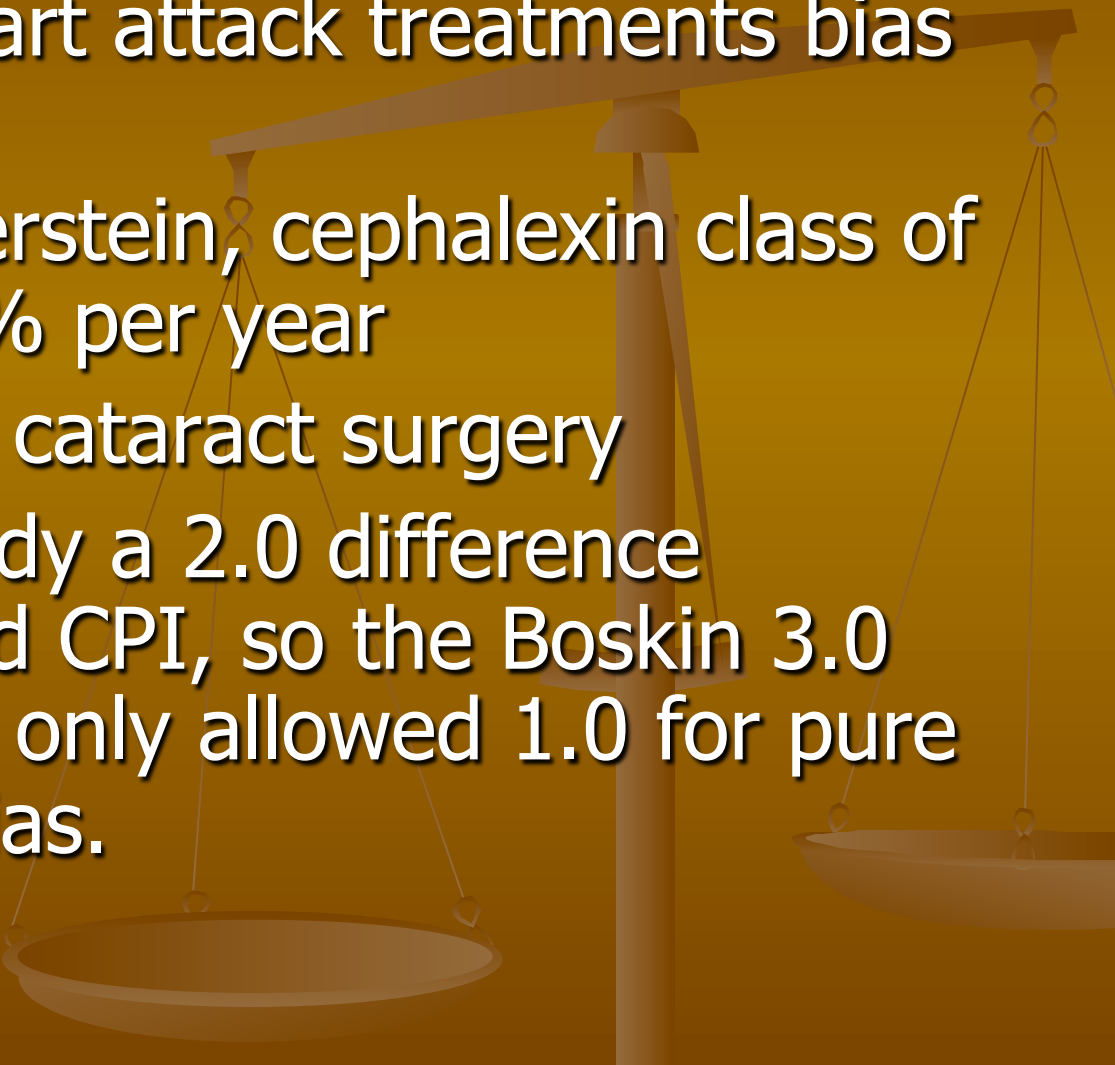
Speed of the BLS Response

- Geometric weighting at lower level, expected to reduce CPI by 0.2
 - Faster change in upper-level weights (2 years vs. 11 years)
 - New sampling procedures to rotate items faster
 - Adoption of previous PPI approach to hospital care
 - Personal computers, TVs
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New Research Since 1999-2000: Hausman on Wal-Mart

- “Does the BLS Know that Wal-Mart Exists?”
NBER WP 10712 Aug 2004
 - Typical food item at Wal-Mart is 15-25% cheaper than at standard supermarkets (based on scanner data)
 - BLS links out lower Wal-Mart Prices
 - Food at home inflation overstated by 0.32-0.42 points
 - Helps with puzzle: negligible growth in median real income since 1973 but everyone seems to be getting better off
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New Research on Medical Care

- Cutler *et. Al.* heart attack treatments bias of 3.1-3.5%
 - Ellison and Hellerstein, cephalixin class of antibiotics 3.78% per year
 - Shapiro *et al* on cataract surgery
 - There was already a 2.0 difference between PPI and CPI, so the Boskin 3.0 estimate of bias only allowed 1.0 for pure measurement bias.
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New Research on Durable Goods

- Ohashi 12 percent per year on VCRs 1978-87
 - Cell phones alone (Hausman) account for 0.8-1.9 percent per year
 - Indirect approach by Bils (NBER WP 10606) 2004
 - Increased expenditures on goods with higher prices, implicit quality change of 5.8% per year, more than double that in CPI
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