

CONCEPT: PROBLEMS WITH THE CONSUMER PRICE INDEX

- The Consumer Price Index (CPI) as a measure of inflation can run into biases that tend to overstate inflation:
 - **Substitution Bias** – CPI assumes that the same amount of each product is purchased each month
 - > However, customers are likely to buy fewer of products that increase in price (and vice versa)
 - > Example: Apple prices rise significantly, orange prices rise slightly → Substitute apples with oranges
 - > Since the CPI assumes apple purchases remain constant, the CPI will overstate the actual basket price
 - **Quality Bias** – Over time, items in the basket improve in quality
 - > Example: faster computers; safer cars
 - > Higher quality items will have these quality improvements embedded into the price
 - > Thus, although prices may have increased by inflation, they may have increased due to quality as well
 - **New Product Bias** – New products introduced since the last “basket” will not be included in the “basket”
 - > Example: Cell phones were not included in CPI until the late 1990s, though millions were in use
 - > Price decreases tend to happen in years following new technology (i.e. DVD players, HDTVs)
 - > If the technology is not included in the basket, then these price decreases will not reflect in CPI
 - **Outlet Bias** – The way people shop has changed over the years
 - > CPI was consistently calculated at full-retail prices available in stores
 - > However, consumers also purchased at discount chains (Costco, Sam’s Club) and online
 - > The prices used could overstate the actual prices paid by consumers depending on the chosen outlet