Real GDP

For 2019 real GDP we use prices paid in base year

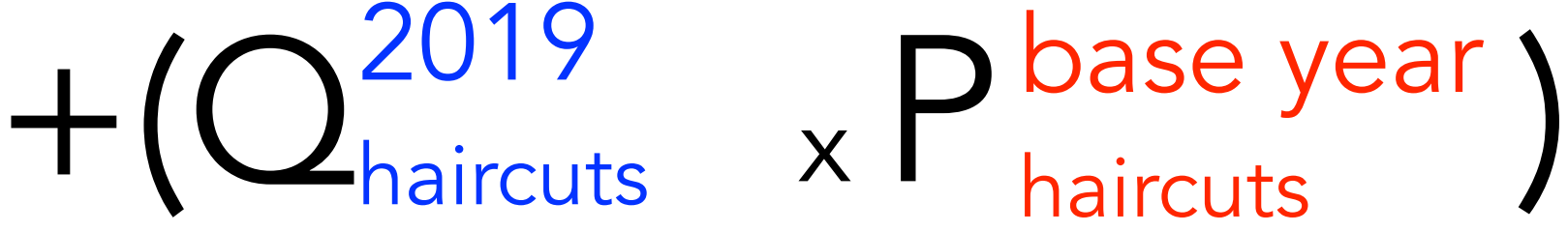

2019 Real GDP use
quantities purchased in
2019 but uses prices
paid in the base year

Since prices are fixed at base year prices, if Real GDP changes it's because quantities changed, not prices

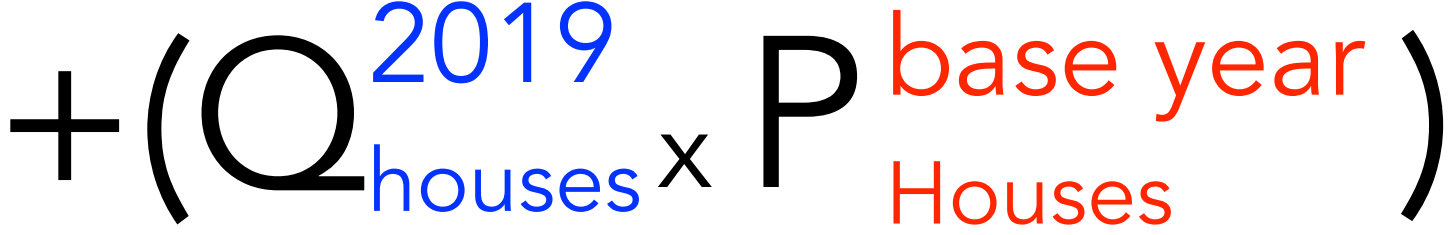
= $11,000B

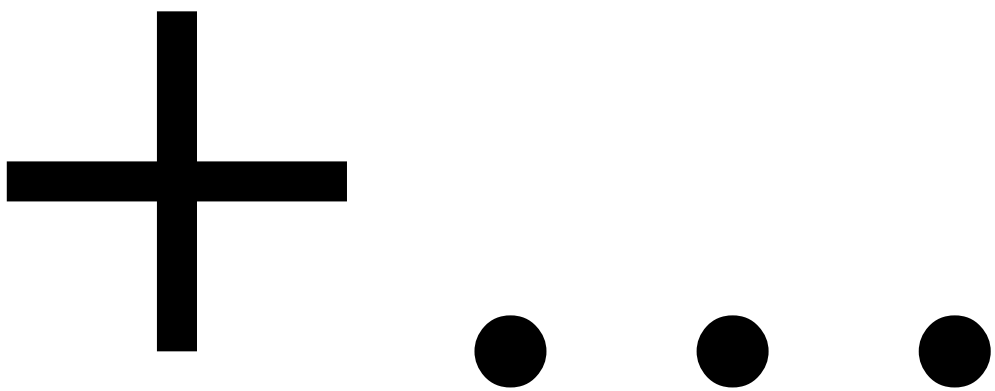
$$(Q_{\text{apples}}^{2019} \times P_{\text{apples}}^{\text{base year}})$$


+(Q 2019 computers x P base year computers)


+(Q 2019 haircuts x P base year haircuts)

$$+\left(Q_{cars}^{2019} \times P_{cars}^{base\ year}\right)$$


+(Q 2019 houses x P base year Houses)



For 2019 real GDP we use prices paid in base year

$$(Q^{2019}_{apples} \times P^{base\ year}_{apples}) + (Q^{2019}_{computers} \times P^{base\ year}_{computers}) + (Q^{2019}_{haircuts} \times P^{base\ year}_{haircuts})$$

$$+ (Q^{2019}_{cars} \times P^{base\ year}_{cars}) + (Q^{2019}_{houses} \times P^{base\ year}_{Houses}) + \ldots = \$11{,}000B$$

2019 Real GDP use quantities purchased in 2019 but uses prices paid in the base year

Real GDP

Since prices are fixed at base year prices, if Real GDP changes it's because quantities changed, not prices

Nominal GDP

Real GDP