



## Nominal Vs. Real Wage Growth

Nominal wages, measured by nonfarm compensation per hour, grew at an average annual rate of 5.5 percent between 1947 and 1973 and 6 percent between 1973 and 1996. Yet real wages grew much faster during the earlier period than during the later one. This discrepancy between the growth rates of nominal and real wages underlies current concerns about stagnant standards of living since 1973.

What is the difference between a nominal wage and a real wage? A nominal wage is the compensation received by a worker measured in current dollars. A real wage adjusts the nominal wage by its purchasing power and determines our standards of living. Therefore, nominal wages may increase without a corresponding increase in standards of living, if increases in nominal wages reflect higher prices.

Changes in nominal wages, however, reflect more than changes in prices; they also reflect changes in labor productivity. Economic theory states that the price of the good or service produced and the productivity of labor determine nominal wages. Therefore, growth of nominal wages should depend on changes in the price of goods and services (the inflation rate) and the growth of labor productivity. So an increase in nominal wages may reflect an increase in prices or an increase in labor productivity.

The chart shows the movements of the annual growth rates of nonfarm compensation

per hour, as well as two statistics that measure the two factors determining nominal wages—the GDP chain price index (a measure of overall prices) and nonfarm output per hour (a measure of labor productivity). Consistent with theory, the growth of nonfarm compensation per hour appears to track the sum of the growth rates of the two factors.

The chart also shows the changes in the relative contributions of inflation and labor productivity growth to the rise in nominal wages. Although nominal wages have grown faster since 1973, the composition of their growth since then looks much different than it does prior to 1973. Before 1973, the growth of labor productivity accounted for more than half the growth of nominal wages, but accounted for less than one-fifth of the increase since 1973. So most of the recent growth in wages merely reflects increases in overall prices. Increases in standards of living do not come from higher wages *per se*, but from higher productivity. So while inflation may increase everyone's compensation, it does not increase our standard of living.

—Peter Yoo

