THE BAD NEWS ABOUT EARNINGS PER MEMBER OF THE POPULATION SINCE 2000, AND HOPE FOR THE FUTURE

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Hoover Conference on
Restoring Prosperity: Contemporary and Historical Perspectives

February 9, 2017
The measure

Real earnings per member of the population
The measure

Real earnings per member of the population

not per worker
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Encompasses changes in the labor force and unemployment, as well as the earnings of workers
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Measured before taxes and transfers; including benefits
John Fernald’s fully updated spreadsheet on the SF Fed’s website, plus population data from the BLS. Calculations available on my website.
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Variable of interest is

\[
\frac{\text{Total real earnings}}{\text{Total population}}
\]
Decomposition

Total real earnings = [labor share] \times [real output]
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Total real earnings = [labor share] × [real output]

Break real income into [productivity per unit of labor input] × [volume of labor input]
Decomposition

Total real earnings = [labor share] \times [real output]

Break real income into [productivity per unit of labor input] \times [volume of labor input]

Productivity is

\[
\frac{\text{real output}}{\text{quality-adjusted total hours}}
\]

the denominator is the volume of labor input.
Decompose volume of labor input

- Hours per worker
- \times \text{ quality of hours}
- \times \text{ workers per member of the labor force}
- \times \text{ members of the labor force per working-age person}
- \times \text{ working-age people as a fraction of total population}
Seven-way breakdown of real earnings per member of the population

1. Labor productivity
2. Labor share
3. Hours per worker
4. Quality per hour
5. Employment rate: 1–unemployment
6. Ratio of labor force to population 16-60
7. Working-age fraction of the population of all ages
Real earnings per member of the overall population
HOURS PER EMPLOYED PERSON
Labor quality
Employment rate: 1-unemployment
Ratio of labor force to population aged 16 to 60
Fraction of population aged 16 to 60
Real earnings per member of the overall population
Sum of contributions of factors other than productivity