

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

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THE MEASURE

Real earnings per member of the population

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Measured before taxes and transfers; including benefits

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DATA

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

$$\frac{\text{Total real earnings}}{\text{Total population}}$$

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DECOMPOSITION

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

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Productivity is

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

the denominator is the volume of labor input

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DECOMPOSE VOLUME OF LABOR INPUT

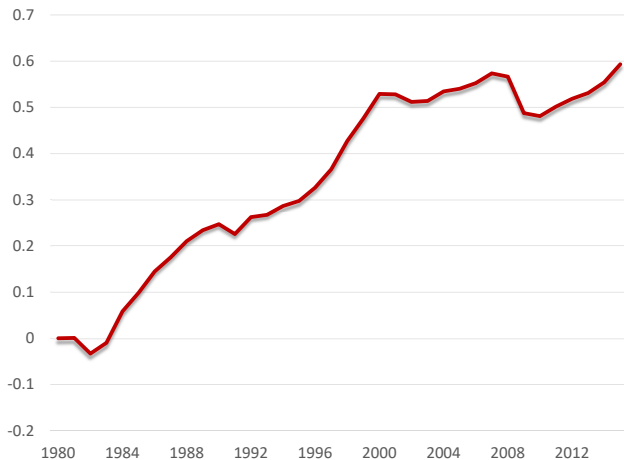
- ▶ Hours per worker
- ▶ \times quality of hours
- ▶ \times workers per member of the labor force
- ▶ \times members of the labor force per working-age person
- ▶ \times working-age people as a fraction of total population

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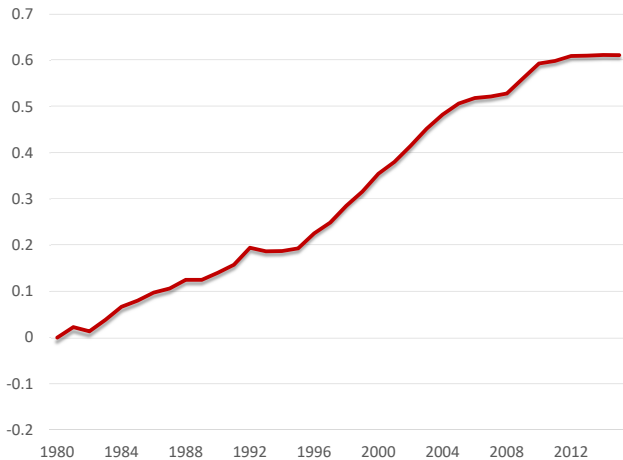
SEVEN-WAY BREAKDOWN OF REAL EARNINGS PER MEMBER OF THE POPULATION

1. Labor productivity
2. Labor share
3. Hours per worker
4. Quality per hour
5. Employment rate: $1 - \text{unemployment}$
6. Ratio of labor force to population 16-60
7. Working-age fraction of the population of all ages

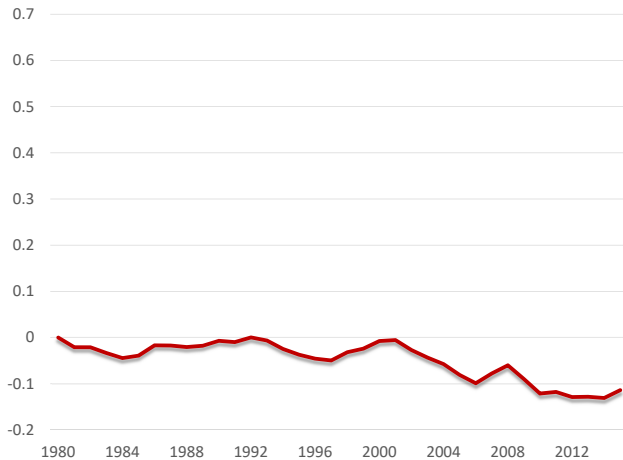
REAL EARNINGS PER MEMBER OF THE OVERALL POPULATION



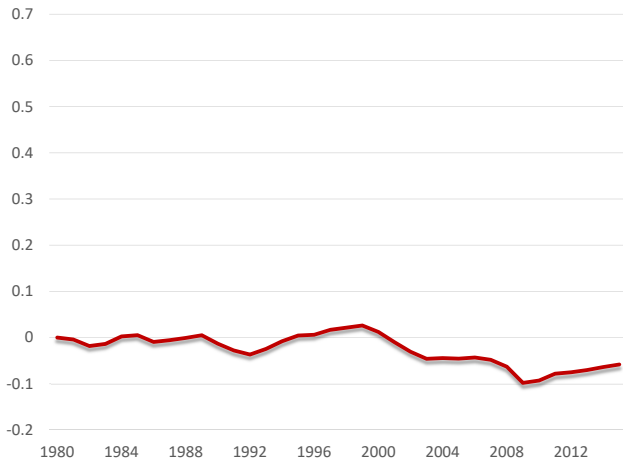
PRODUCTIVITY



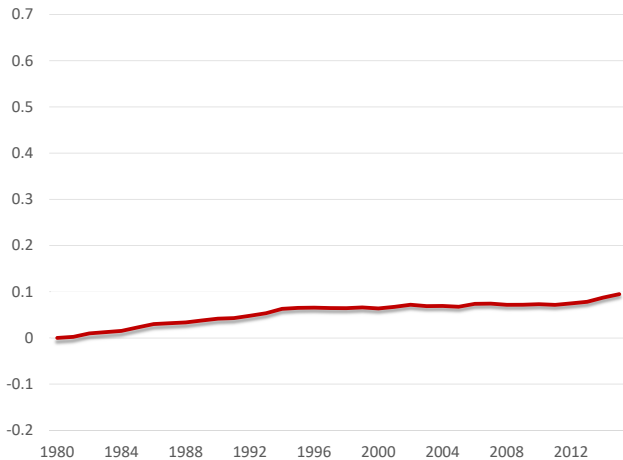
LABOR SHARE OF INCOME



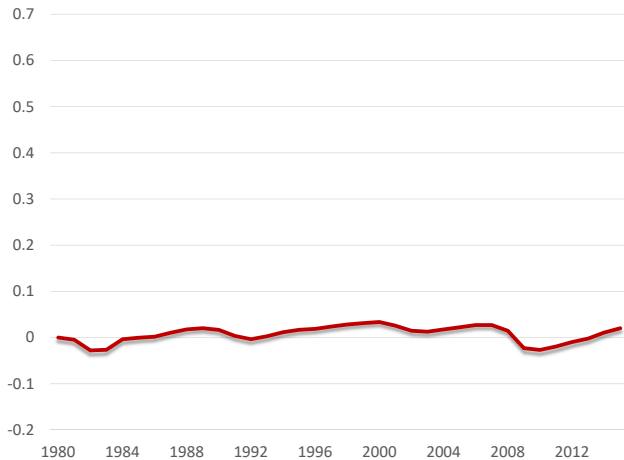
HOURS PER EMPLOYED PERSON



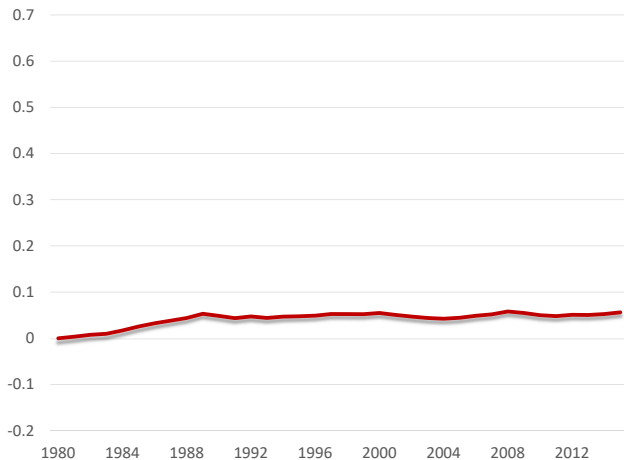
LABOR QUALITY



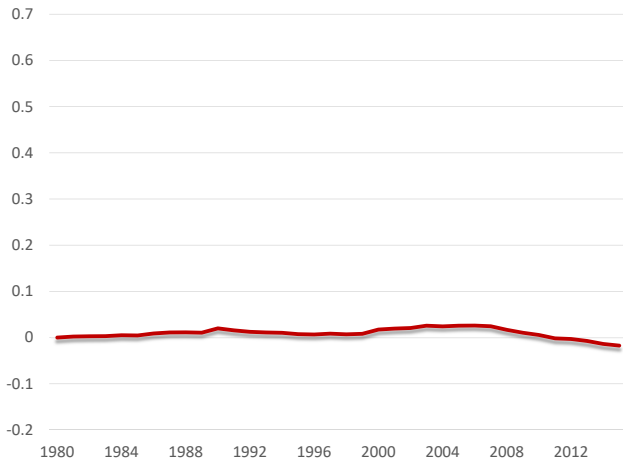
EMPLOYMENT RATE: 1-UNEMPLOYMENT



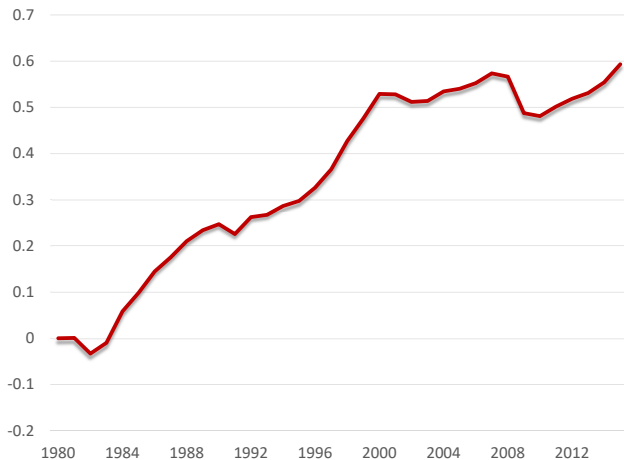
RATIO OF LABOR FORCE TO POPULATION AGED 16 TO 60



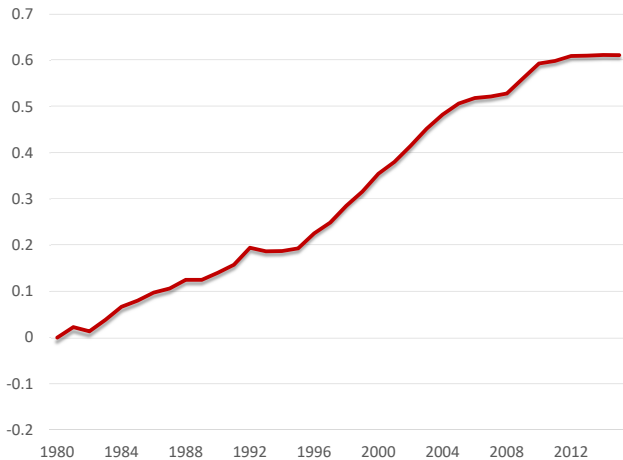
FRACTION OF POPULATION AGED 16 TO 60



REAL EARNINGS PER MEMBER OF THE OVERALL POPULATION



PRODUCTIVITY



SUM OF CONTRIBUTIONS OF FACTORS OTHER THAN PRODUCTIVITY

