

## Appendix 4.1

### Alternative Measures of Wages & Labor Cost

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#### **Hourly Compensation** (quarterly since Q1-1947)

Indexes of compensation per hour measure the hourly cost to employers of wages and salaries, as well as supplemental payments, which include employers' contributions to Social Security, unemployment insurance taxes, and payments for private health insurance and pension plans. Measures of real compensation per hour reflect the adjustment of hourly compensation for changes in the Consumer Price Index for All Urban Consumers (CPI-U).

These quarterly data include direct payments to labor—wages and salaries (including executive compensation), commissions, tips, bonuses, and payments in kind representing income to the recipients—and supplements to these direct payments. Supplements consist of vacation and holiday pay, all other types of paid leave, employer contributions to funds for social insurance, private pension and health and welfare plans, compensation for injuries, etc. The compensation measures taken from establishment payrolls refer exclusively to wage and salary workers. Labor cost would be seriously understated by this measure of employee compensation alone in sectors such as farm and retail trade, where hours at work by proprietors represent a substantial portion of total labor input. BLS, therefore, imputes a compensation cost for labor services of proprietors and includes the hours of unpaid family workers in the hours of all employees engaged in a sector. (Source: [Productivity Measures: Business Sector and Major Subsectors](#), Bureau of Labor Statistics Handbook, Chapter 10.)

#### **Employment Cost Index** (quarterly data since Q1-1980)

The ECI is a measure of the change in the cost of labor, independent of the influence of employment shifts among occupations and industry categories. The total compensation series includes changes in wages and salaries and in employer costs for employee benefits. The ECI calculates indexes of total compensation, wages and salaries, and benefits separately for all civilian workers in the United States, for private industry workers, and for workers in state and local government. For all of these categories, the ECI calculates the same indexes by occupational group, worker attribute, industry group, and establishment characteristic. Seasonally adjusted series are calculated as well.

Employer costs for employee benefits are collected for paid leave—vacations, holidays, sick leave, and personal leave; supplemental pay—premium pay for work done in addition to that performed during the regular work schedule (such as overtime, weekends, and holidays) and for shift differentials, and nonproduction bonuses (such as yearend, referral, and attendance bonuses); insurance benefits—life, health, short-term disability, and long-term disability insurance; retirement and savings benefits—defined benefit and defined contribution plans; and legally required benefits—Social Security, Medicare, federal and state unemployment insurance, and workers' compensation. (Source: [National Compensation Measures](#), Bureau of Labor Statistics Handbook, Chapter 8.)

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**Employer Costs for Employee Compensation** (quarterly data since Q1-1947)

The ECEC series measures the average cost to employers for wages and salaries, and for benefits, per employee hour worked. The series provides quarterly data on employer costs per hour worked for total compensation, wages and salaries, total benefits, and the following benefits: paid leave—vacations, holidays, sick leave, and personal leave; supplemental pay—premium pay for work in addition to the regular work schedule (such as overtime, weekend, and holiday work) and for shift differentials, and nonproduction bonuses (such as yearend, referral, and attendance bonuses); insurance benefits—life, health, short-term disability, and long-term disability insurance; retirement and savings benefits—defined benefit and defined contribution plans; and legally required benefits—Social Security, Medicare, federal and state unemployment insurance, and workers' compensation. Cost data are presented both in dollar amounts and as percentages of total compensation. The ECEC uses current employment weights to reflect the composition of today's labor force. (Source: [National Compensation Measures](#), Bureau of Labor Statistics Handbook, Chapter 8.)

**Average Hourly Earnings** (monthly data since January 1964)

Average hourly earnings are on a “gross” basis. They reflect not only changes in basic hourly and incentive wage rates, but also such variable factors as premium pay for overtime and late-shift work and changes in output of workers paid on an incentive plan. They also reflect shifts in the number of employees between relatively high-paid and low-paid work and changes in workers' earnings in individual establishments. Averages for groups and divisions further reflect changes in average hourly earnings for individual industries. Averages of hourly earnings differ from wage rates. Earnings are the actual return to the worker for a stated period; rates are the amount stipulated for a given unit of work or time. The earnings series do not measure the level of total labor costs on the part of the employer because the following are excluded: benefits, irregular bonuses, retroactive items, payroll taxes paid by employers. (Source: [Employment, Hours, and Earnings from the Establishment Survey](#), Bureau of Labor Statistics Handbook, Chapter 2.)

**Median Wage Growth Tracker** (monthly data since March 1983)

The Atlanta Fed's Wage Growth Tracker is a measure of the nominal wage growth of individuals. It is constructed using microdata from the Current Population Survey, and is the median percent change in the hourly wage of individuals observed 12 months apart. This series tracks the median wage growth rate, not the median wage. It calculates the wage growth of people who were working in the survey over the course of a year, and constructs a distribution of growth rates, which is used to calculate three-month moving average median. So the median growth rate in any given month could be for low-, high-, or mid-wage workers. (Source: [Wage Growth Tracker](#), Federal Reserve Bank of Atlanta.)