

Chapter I. Introduction

The Employment Cost Index (ECI) was developed in the early 1970's in response to policy makers' need for a timely, accurate, and comprehensive indicator of changes in employers' labor costs that was free from the influence of employment shifts among industries and occupations. The ECI is published in the month following the reference months of March, June, September, and December. It covers both wages and salaries and employer costs for employee benefits for all occupations and establishments in both the private nonfarm sector and State and local government. This broad coverage permits analysis of labor cost changes for a major portion of the U.S. economy. The objective of measuring change unaffected by employment shifts is accomplished by holding the distribution of employment among industries and occupations fixed over time, and by defining narrowly enough the jobs for which data are collected each quarter so that all workers carry out the same task at roughly the same skill level.

Background

ECI statistics were first published for September-December 1975 and were limited to private industry wage and salary changes by major occupational and industry groups, region, union status, and area size. Over time, new series were added. In 1980, measures of total compensation cost changes (employer costs for employee benefits in addition to wages and salaries) were developed as the rapid growth of employee benefits made it inappropriate to define the cost of labor in terms of a wage rate alone.

Benefits covered by the ECI survey are: Paid leave (vacations, holidays, sick leave, and other paid leave); supplemental pay (premium pay for overtime and work on weekends and holidays, shift differentials, and non-production bonuses such as lump-sum payments provided in lieu of wage increases); insurance benefits (life, health, and short- and long-term disability); retirement and savings benefits (defined benefit and defined contribution plans); legally required benefits (Social Security, railroad retirement, railroad unemployment insurance, Federal and State unemployment insurance, workers' compensation, and other legally required benefits such as State temporary disability insurance); and other benefits (severance pay and supplemental unemployment insurance).¹

¹ Beginning in 1995, some benefits were reclassified. The two categories of benefits under retirement and savings were previously pensions and savings and thrift plans. Long-term disability insurance, previously included with sickness and accident insurance, is now reported as a separate benefit. Old age, survivors, and disability insurance (OASDI) and Medicare, the components of Social Security, are now collected separately.

In June 1981, the State and local government sector was added, so that currently, 94 percent of all civilian wage and salary workers are covered. (See chart 1.)

Since 1981, several wage and salary, benefit cost, and compensation cost change series have been added to the ECI.² Among these series are wage and compensation cost changes for hospitals and all health services, as well as business services, communications, food stores, and insurance. Because these series were made possible by a growing sample size, indexes could not be extended back to 1981, and index levels were not, therefore, published. Therefore, in March 1990 the ECI changed to a new base, June 1989=100. This change permitted publication of indexes for all ECI series available at the time the rebasing occurred.

Since December 1990, seasonally adjusted data have been available for ECI major industry and occupational series. Seasonally adjusted data are useful in identifying underlying trends because they eliminate the effect of changes that normally occur at the same time and in about the same magnitude every year. Compensation cost changes for State and local government workers, for example, are heavily concentrated in the June-September period of every year, whereas those for private industry workers are spread throughout the year. Also, health insurance premium increases typically are concentrated in the January-March period.

The ECI, like most fixed-weight Laspeyres indexes, periodically changes its weights. Indexes initially were based on employment counts by occupation and industry from the 1970 Census of Population. The fixed weights were changed to 1980 employment counts in June 1986, and to 1990 employment counts in March 1995. Changes in weights affect how indexes are interpreted, but usually have little impact on rates of wage and compensation change.³

In 1987, a new measure based on data from the ECI survey—Employer Costs for Employee Compensation—became available annually for private industry, and subsequently for State and local government in 1991. This series is discussed in a separate bulletin.

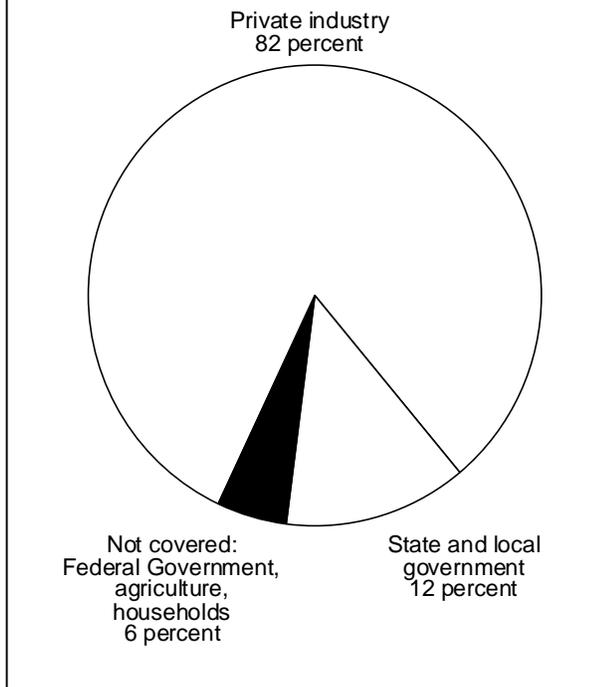
Uses

The ECI was developed primarily to aid in economic analy-

² The Bureau is evaluating published ECI series to ensure they meet statistical standards for reliability. Preliminary research has targeted 37 series for elimination from published material. These series are marked with a footnote in the historical tables. Series that fail reliability standards will no longer be published after June 1998 but will be available upon request.

³ See Albert E. Schwenk, "Introducing 1990 Weights for the Employment Cost Index," *Compensation and Working Conditions*, June 1995, pp. 1-5. This article is reprinted in this bulletin, pp. 128-132.

Chart 1. Coverage of the Employment Cost Index, total civilian employment, 1997



sis, and that remains its most important use. Analysts and policy makers, including the Federal Reserve Board, use the ECI to form monetary policies and to monitor the effects of those policies.

The ECI has proven useful in a number of other ways. It is used to forecast wage trends and facilitate wage and benefit cost planning. In collective bargaining in private industry and the public sector, the ECI serves as a guide in negotiations. Several health cost containment laws, including one for Medicare, use the ECI as an adjustment factor to determine the allowable increases in hospital and physi-

cian charges. Increasingly, the ECI is being used as a labor cost escalator in long-term purchasing and service contracts in both the private and public sectors in the United States as well as in other countries.⁴

The ECI is also used in the Federal pay-setting process. For example, the Ethics Reform Act of 1989 specifies that the pay of Congress, Federal judges, and top Government officials would be increased each year by the change in wages and salaries for private industry workers (an ECI measure), less 0.5 percentage point.⁵ The Federal Employees Pay Comparability Act of 1990 specifies that the ECI will be used to adjust pay for General Schedule employees.⁶

The ECI also is used to develop measures of national economic performance and welfare. For example, the ECI is used to update the income side of the National Income and Product Accounts of the U.S. Department of Commerce, Bureau of Economic Analysis. Also, the Health Care Financing Administration of the U.S. Department of Health and Human Services uses the ECI to estimate aggregate expenditures for health care.

Limitations

Like other statistical series, the ECI has limitations. It does not cover all employers and employees, although it does cover nearly all workers in the civilian, non-Federal economy. It excludes the self-employed and farm, household, and Federal Government employees. Because it is based on a probability sample, the ECI survey is subject to sampling errors that may cause the estimates to deviate from the results that would be obtained if the records of all establishments could be used in the calculations. Because probability samples are used, standard errors can be calculated and are presented in the appendix to this report. Standard errors can be used to measure the precision of the estimates.

⁴ For guidance in using the ECI as an escalator, see Albert E. Schwenk, "Escalation in Employer Costs for Employee Compensation: A Guide for Contracting Parties," *Compensation and Working Conditions*, Spring 1997, pp. 3-9. This article is reprinted in this bulletin, pp. 174-181.

⁵ See Public Law 101-154—November 30, 1989.

⁶ See Public Law 101-509—November 5, 1990.