

DISCUSSION

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The Employment Cost Index (ECI) is a new, important, BLS series. These papers by Hoy, Wright and Kaufman, and Marks and Frevert are a good, initial descriptive set for informing survey researchers about the operational methodological aspects. The papers, in my judgment, are well organized and present some useful information about operating results -- more such data (as suggested in several comments below) would be welcome. Perhaps, as the authors prepare the papers for formal publication they can provide more of the available data so that others can judge the quality of the process. In that way more useful comments and critiques could be offered.

Additional evidence about quality should be a near term objective. Some of the data could be gathered by a Quality Measurement Survey (QMS), which could start as a modest effort and be expanded as needed (and feasible) to shed light on specific quality issues. I'm sure the staff at BLS believe they now have a good product. But, it would be well to know, objectively, about the relative quality now, as the series starts, and over the longer term if and when some quality problems occur. Even now, some research using a QMS vehicle could shed light on the question raised-- whether changes in the longevity mix of employees within an occupation within an establishment significantly affect the reported changes in the average hourly wage rates.

Hoy briefly describes the survey requirements, planning elements and the design. He properly points out that the basic structure of the survey design was devised for flexibility for achieving goals beyond those possible with the initial resources. In planning the ECI and in determining the initial optimum results, available data were used in estimating the variance components. Unit cost components were based on available data as well as cruder estimates.

Survey based estimates of variances will permit answers to such questions as:

- . How well are the survey's precision goals being achieved?
- . What design modifications are desirable?

The paper does not identify that unit cost component data are to be collected. Are there present or planned efforts to collect and analyze such data?

The paper points out problems encountered in the implementation. During survey initiation an overall 15 percent refusal rate occurred. It would be of interest to know how this distributes by industry. Since a probability sample of establishments is used it is possible for BLS to track and report such facts for the ECI. It would be of interest to know how the out-of-business/out-of-scope rate of 15 percent is distributed by industry. The Construction Industry is identified in the paper as the most critical. How critical? Similarly, the paper identifies the Salesworker Occupation Group as the most critical major occupation group. How critical was this group as compared to the other groups? The solution to the shortage of quotes

for salesworkers is carefully described. The character of the UI reporting units lead to the incidence of out-of-business for the Construction Industry. It is, therefore, proposed to have sample rotation occur fairly frequently for this industry. What plans are there for sample rotation for other industries?

The occupational detail of Census is identified as too broad for large establishments and too narrow for small establishments. How often were these situations found? How much broader are the entry level occupations that will be used in combination with disaggregation sampling techniques?

Interesting information is supplied on how the Government sampling is being handled. What were the variance/cost tradeoffs that led to use of whole States as first stage PSU's?

It would be interesting to learn how BLS plans to use updated UI frames for representing the births. How will 1980 Census data on occupation by industry be used?

The Wright and Kaufman paper presents a good deal of information on the ECI estimation procedures. Possible future changes are indicated. It would be interesting to consider if the thoughts presented by the Madows (1978) offer any possibilities for ECI. Research possibilities abound.

At present, some subindexes appear inconsistent with the national index. There are plans to deal with this. How will the transition be carried out? What will be the effect on the variance of the national index?

The paper describes allocation and imputation procedures. How often are they used and what are the effects, by rational subsets? It would be useful to have the full distribution of response rates by size of establishment. When non-response adjustments by size are instituted, it would be useful to know the effect.

There is a discussion of collapse cells. How often does this occur? What is the basis for: "In this way the mean square error is hopefully reduced by making the decrease in variance greater than the corresponding increase in bias."?

The Marks-Frevert paper describes variance estimation plans. The authors note that controlled selection was not carried out within replicates of establishments crossed with occupations. Perhaps, where there are multiple patterns, an even number of subsets properly used could provide useful insights. The paper outlines several options for variance estimation. Results when available should be most interesting.

Reference

Madow, L.H. and Madow, W.: "On Link Relative Estimators," 1978 Annual Amer. Stat. Assn. meetings.