Playing the Numbers:

Our Stake in Official Economic Data

Today, everyone seems to be in the numbers racket. Some claim that our official data do such a bad job of measurement that policy and perception are severely distorted. Some see significant economies in government to be achieved by combining the major statistical agencies into a data superagency. Some see national social problems — especially race and ethnicity — tied symbolically to the way we do our official tabulations. The way we record the ethnicity of respondents to various surveys is seen as closely related to the issues of diversity. In short, policy makers, academics, practitioners, and the popular media all have something to say about the American statistical system and their comments are often critical.

Current Statistical Controversies

While there is a long history of skepticism about the meaning of official numbers — certainly going back to the era during which the IRRA was created — the current concern about federal statistics would undoubtedly have been surprising to someone from that period. Data gathering and dissemination, after all, are technical jobs performed by government agencies with which most Americans have little contact. A portion of the explanation for the current atmosphere of controversy is that the user base for official data has expanded, in part due to easier access. Still, public policy remains importantly linked to official numbers, far more than it was fifty years ago. And there is an assumption among policy makers that with the “correct” data, the correct policy will be adopted. Conversely, it is assumed that bad policy will follow from bad numbers.

The first wave of concern about official data, including labor market data, was sparked by budget cuts at the statistical agencies under the Reagan administration. Some of the cuts reflected general budgetary restrictions that might have been expected under any conservative administration. Some may also have reflected an ideological shift away from activist economic policy linked to official data. (If it isn’t the government’s job to keep real national income growing or keep the unemployment rate down, why measure these concepts?)

Not surprisingly, stringency in statistical budgets sparked concern and hearings in the Democratic Congress. Academics began to fret, especially in the late 1980s, that there had developed sufficient deficiencies in official data so that policy making and research were compromised. Ultimately, the Bush administration — less ideological than its predecessor — proposed an “Economic Statistics Initiative” to improve the nation’s statistical apparatus. Although the initiative was not completely implemented, it did mark a turnaround in statistical policy which might have put the controversy over official data to rest. As it turned out, however, that was not to be.
Now You See It, Now You Don't

Various statistical errors and problems served to heighten public awareness of government data in the 1990s. Statistical verities seemed peculiarly prone to revision. For example, it was believed for many years that real wages had stopped rising apace with national productivity, a break from the past. Yet much of this wage-productivity gap turned out to be the product of "hedonic" adjustments of the output of the computer sector introduced by government statisticians in the 1980s. These adjustments exaggerated the growth of aggregate output. When a new measure of real national output was released, which effectively suppressed the computer-sector effect, the worrisome wage-productivity gap largely disappeared.

Similarly, rapid measured real output increases during the upswing after the 1990-91 recession sparked the notion of a "jobless recovery," i.e., output rising without the expected number of new jobs being created. The revised slower rate of official real growth also eliminated this puzzle; new jobs were not being created rapidly because the economy was not growing rapidly. Even more recently, official BLS estimates of displaced workers were published and then withdrawn and revised in 1996 after a private researcher found methodological errors in the original release. The displaced worker series is a particularly sensitive one because of concerns about corporate downsizing. Such episodes of rewriting of national economic history naturally have engendered concern among policy makers and forecasters that the U.S. is failing to track its own economic performance.

But it is not only research professionals and policy makers who have become concerned. The observation that supposed trends could vanish after a technical revision by government statisticians has also led to popular skepticism about official data. Symbolic of this doubt was the front cover of Business Week dated November 7, 1994, which carried the headline "The Real Truth About the Economy: How Government Statistics Are Misleading Us." The contents of the issue contained a standard brew of complaints: not everyone who might be considered unemployed by some definition is counted that way; inflation rates are overstated (see below); productivity is really rising faster than official numbers suggest because services cannot be properly quantified; "globalization" distorts measures of industrial capacity; etc.

Although the text of the Business Week article did not suggest a conspiracy behind these problems, the cover headline, with the word "misleading" prominently in view, could easily be taken by the casual reader to mean that government statisticians were deliberately deceiving the nation. The text itself attributed the problems enumerated to incompetence and technical causes. But given the American propensity to look for conspiracies, and given the climate of distrust of government, impressions of deliberate data manipulation gleaned from the media must be taken seriously because they affect public perceptions.

Indeed, a data conspiracy was explicitly charged in one instance in the early 1990s. An administrative snafu at the U.S. Bureau of Labor Statistics (BLS) led to substantial revisions (later characterized by BLS as erroneous) and then re-revisions (to correct the errors) of official payroll employment data during the 1990-91 recession. Because GDP data are derived in part from payroll figures, it was expected that GDP revisions...
would show similar corrections. When sharp GDP revisions did not appear, some in the press charged that there was a conspiracy at the Bureau of Economic Analysis (BEA) — the agency that publishes the national accounts. In essence, the BEA was said to be covering up the recession for the election-minded Bush administration, a charge later refuted by the General Accounting Office (GAO).  

**Political Intervention**

Probably the most dramatic event to date involving official data has been a congressionally inspired attempt to force BLS to modify the Consumer Price Index (CPI), one of the most visible economic indicators. The charge behind this effort was that the CPI overstates the national inflation rate. A task force — the so-called Boskin Commission — was established to produce an estimate of this alleged bias. Unlike many other economic series, the CPI automatically determines public policy. In particular, Social Security benefits and income tax brackets are both indexed to the CPI.

Cutting the measured CPI inflation rate would raise taxes and lower benefit expenditures. GAO estimates suggest that each 0.1 percent increase in the CPI adds about $10 billion to the federal budget deficit over a five-year period, i.e., a 1 percent upward bias in the CPI would add $100 billion to the five-year deficit. With concerns mounting about the federal deficit, the low rate of national saving, and the impact of the baby boom's retirement on the Social Security system, the bipartisan appeal of a seemingly technical fix to all of these problems is evident. However, there is probably a greater net appeal of the CPI to those on the right; lowering the CPI inflation rate would rewrite the last couple of decades of U.S. economic history in a rosy manner. Real wages have not been stagnant after all, if the CPI inflation rate is overstated. Productivity and real output have been rising at a respectable pace. In short, the economic problems that those on the Left have criticized have never occurred and therefore do not need public attention.

After the 1994 congressional elections, the political ramifications of the CPI became clear. In early 1995 House Speaker Newt Gingrich threatened to "zero...out" the BLS if the agency did not fix the "error" in the CPI within 30 days. Congressional Democrats initially went to the other extreme; Minority Leader Richard Gephardt introduced a bill forbidding the BLS from changing the CPI during the 104th Congress. However, because CPI revision does have a certain bipartisan appeal, both Democrats and Republicans could see virtues in having BLS make technical changes that would result in deficit reduction and Social Security cuts without Congress having to take a vote. Thus some Democrats began to join their Republican counterparts in demanding a CPI fix.

The congressionally appointed Boskin Commission finally issued its much-leaked report in late 1996, arguing that CPI-measured inflation was biased upward by 1.1 percent per annum. Almost immediately, Democratic congressman Charles Stenholm — representing the centrist "Blue Dog" coalition — announced plans to legislate a reduction in the CPI. Stenholm indicated that the mandated change would be 0.5 percent/year but stated that the coalition was "looking to see if they could go higher." The spectacle and implications of a congressionally legislated inflation rate seemed largely to escape commentaries in the popular media. Instead, the focus was on the now-common theme of the prevalence of misleading government data.

What does all of this ferment around economic data mean for specialists in industrial relations, both academics and practitioners? Should such specialists play a role in determining statistical policy? Does the IRRA as an organization have a part to play, if that role exists? To address these question, it is necessary first to delve into statistical history.

**Origins of Labor Statistics**

Ironically, in its early guise the collection of labor statistics was seen as critical to public policy. The modern Bureau of Labor Statistics had its origins in the one-time federal Bureau of Labor, established in 1884 as a predecessor to the Department of Labor. In turn, the federal Bureau of Labor owed its origins to a movement to set up state bureaus of labor. Massachusetts established the first one in 1869, and the example began to spread. Proponents argued that having an agency devoted to ferreting out the facts about social problems would surely lead to public demands to solve those newly documented problems. Cures would necessarily follow exposure.

Although the BLS did not become the center of agitation that early reformers might have hoped, its evolution away from being an exposé of social evils and into a technical, statistical agency was gradual. Some of the slowness was due to the policies of Carroll Wright, the first commissioner of the Bureau of Labor. Wright resisted merger or coordination of the BLS with the more technically oriented Bureau of the Census, even though he personally played an important role in Census development and administration.

Nonetheless, the process of BLS evolution toward a technical orientation was helped along by the creation of a cabinet-level Department of Labor in 1913 when the new Department effectively took over the social charge of the old Bureau. More important were the growing demands for statistical information that accompanied federal interventions in the economy.
During World War I, the New Deal, and World War II. Some of the earliest series maintained by the BLS involved consumer prices, wages, and employment. Additional series and sophistication were added over time as policy makers demanded more and more.

Thus consumer prices and worker budgets were seen as tools needed to settle disruptive labor disputes, as the concept of the real vs. nominal wage evolved during World War I. However, much of the information gathered during that era was ad hoc and non-continuous. Perusal of early issues of the Monthly Labor Review, for example, reveals articles about particular practices in labor law, one-time studies of social ills, and developments in social insurance at home and abroad that were deemed noteworthy by the editors. Users of labor data at the time, especially practitioners, were often more dependent on such private sources as the National Industrial Conference Board and the Metropolitan Life Insurance Company than upon BLS. Yet even policy concerns did not always result in a quick data response. The BLS passed through the Great Depression without producing a standard series on unemployment — clearly the greatest economic and social problem of the era. It was not until 1940, in anticipation of forthcoming wartime labor shortages, that what is now the Current Population Survey was established.

The Empirical Nature of Industrial Relations

As is well known, the IRRA was originally largely a group of labor economists and labor researchers dissatisfied by the abstract approach favored by the American Economic Association. IRRA founders were more institutionalist in orientation than those who dominated the AEA, and they felt a close link to practitioners. Although today “empirical” tends to connote use of econometrics or other sophisticated empirical techniques, fifty years ago empirical simply meant fact oriented. Econometrics was in its infancy, and the computer on which it now relies barely existed. Observing how the world appeared to function — particularly as it related to unions, wage setting, and other labor market phenomena — was the essence of institutional industrial relations. In short, an institutional orientation and an empirical orientation were closely linked.

The kinds of data collected by the BLS from the late 1940s onward were very much in line with the interests of industrial relations researchers and practitioners. These included employment, unemployment, wages, strikes, and union settlement information. Unions and management made use of consumer price data for contract escalation and bargaining. Settlement information and wage calendars were seen as important by those wage setters who followed bargaining patterns or simply wanted to know what others were doing. By this time the BLS had little competition from private sources of information, the major exception being the Bureau of National Affairs, Inc. (BNA) which published union settlement information in its Daily Labor Report and other outlets.

Because union wage setting was seen as a major issue after World War II, the BLS substantially expanded its coverage of the union sector. Under the 1947 Taft-Hartley Act, the BLS was (and still is) required to maintain a file of union contracts. From this file and from other sources, increasingly detailed reports on union settlements and contract terms were produced. The link between industrial relations and official data collection was symbolized by the appointment of Arthur M. Ross as BLS commissioner (1965–68). While serving as commissioner, he also became president of the IRRA (1966). Ross was a well-known academic proponent of an institutional and political view of union wage determination and a founder of the IRRA.

In more recent years, industrial relations’ influence on official data has markedly declined. The longstanding BLS series on labor disputes was cut back in the early 1980s to include only the largest strikes and lockouts, so much information on the texture of shop floor labor relations was lost. Even more drastic was the total elimination of union settlement data in both the public and private sectors by BLS in 1995–96. The latter cutback occurred just as the labor movement showed signs of new energy and initiatives which accompanied the takeover of the AFL-CIO by John Sweeney and his supporters. Just when the union sector was becoming interesting, its settlement outcomes were largely removed from official data.

Today’s Players and Influences

Various forces today could produce a still more substantial deterioration in labor statistics and economic statistics, generally, if left unchecked. These include federal budget pressures, politicization of official data, longstanding dominance of macroeconomic concerns among policy makers, and unrealistic expectations about the perfectibility of official data. These influences are described below.

Budget Pressures

Statistical agencies are particularly vulnerable to budget pressures. They are perceived to be in the discretionary part of the federal budget and to be without vocal political constituencies, unlike,
say, Social Security or defense. Moreover, statistics collection is diffused over many agencies. GAO counted 72 agencies with statistical functions costing at least $500,000 per year in 1995. A total of $2.6 billion was spread over these agencies. BLS, BEA, and the Census Bureau accounted for a little over a fourth of this total. This decentralization of the statistical function does not foster a unified position by the agencies when faced with budget cutbacks. Thus there is much to be said for consolidation of statistical agencies for better coordination, administrative economies, and a more effective voice in budgetary debates.

** Politicization **

Statistical agencies are seldom rewarded for presenting good news. But bad news is not appreciated. The messenger is often blamed for the message. In the past the agencies have done pretty well in fending off political attacks, but the CPI episode discussed above suggests that the challenge of maintaining the integrity of national data may well intensify. If the Congress were to succeed in modifying a major indicator such as the CPI by fiat, all key data would be called into question and public confidence would be lost.

Note that data by fiat is not the only threat; the pressures may be more subtle than simply ordering a methodological change. In the CPI case, for example, there is a steady demand to look for upward biases in the measured inflation rate. Few voices call for a search for downward biases (although there are some). Academics who have not studied the CPI and who have only vague memories of discussion of “substitution bias” in graduate school need to be careful in their public statements. Soundbites suggesting that BLS doesn’t “know” that consumers make substitutions in the face of relative price changes simply feed media suspicions of government conspiracies to produce misleading data.

** Macroeconomic Concerns **

Issues of inflation, unemployment, growth, and recession tend to dominate the political agenda. Faced with budget restrictions, statistical agencies are likely to consider macro indicators as their core output and the rest of their product of lower priority. As noted, the BLS eliminated much of its union settlement and strike data but retained such macro-oriented programs as multifactor productivity analysis and price indexes for exports and imports.

BEA for decades published a vast array of micro data by industry and sector in its monthly *Survey of Current Business*. But this valuable service was eliminated, along with other BEA programs. BEA today does little more than issue the national income accounts and the international balance of payments. If budget pressures continue, more such contractions toward core macro indicators can be expected. Only if users — academics and practitioners — with a more micro orientation make a strong and vocal case for other sorts of data will sectoral and regional data be preserved.

** Unrealistic Expectations **

It is not sufficiently realized that major statistical series represent attempts to quantify abstract concepts. Real GDP is literally an adding up of (the production of) apples and oranges to approximate the abstract concept of real output. Macro models and data rearrange the world into one or a few sectors of output, a vast oversimplification of the myriad goods and services produced. Similarly, there are many plausible definitions of the concept of unemployment, all of which would produce different absolute counts of the unemployed. Which one is “right”? There is no hard answer. Those who demand a perfect CPI are really demanding to know how much happiness money can buy or — more precisely — the change in the amount of happiness money can buy over time. When put that way, of course, the concept clearly has no precise definition. Yet critics want all of these indicators to be exact.

The statistical agencies can produce plausible approximations to these abstractions. They can even produce alternative plausible approximations and let the user choose the most appealing version. But they cannot satisfy demands for perfection. Take the case of the CPI. The earliest use of the CPI for indexation was in union contracts. But these reopen regularly, typically every three years, and any perceived corrections that are needed can be made at those intervals. Congress, in contrast, seems to want a CPI so perfect that it can leave an indexation formula in place for decades without revisiting taxes and spending. No such price index will ever exist.

Moreover, theoretical perfection must sometimes give way to needs for transparency. The current CPI is defined as the price history of a fixed basket of goods. That is a relatively easy concept to grasp. It is not so easy to grasp the geometric mean of chained Paasche and Laspeyres price index, the so-called Fisher ideal index, which some economists would like to see substituted for the current CPI. The Fisher ideal index does have certain nice theoretical properties that appeal to theorists. But it would be hard to explain to your grandmother on Social Security. Indeed, the introduction of this type of “ideal” index by the BEA for real GDP purposes proved hard to explain to professional users. These users had to confront the practical problem that the components of real GDP no longer sum to the total when the ideal formula is used. What appeals to the theorist, in short, may fall short of user needs.

** What Is to Be Done? **

While it can be argued that official data are too important to be left to the statisticians — and certainly too important to be left to politicians — the hard fact is that these two groups will inevitably play an important role in national statistical policy. The funding for data collection and dissemination comes from the political process. And those closest to the data are those who produce them. A key
defense against politicization of the numbers is the counterforce of neutral professional statisticians in government with no apparent ax to grind. Thus, when BLS responded to the Boskin Commission report that its experts had analyzed the CPI on an ongoing basis and did not find the alleged large biases in the index, the congressional juggernaut slowed markedly.14

What is needed, however, is a third voice, namely users, allied with the government experts and administrators. The IRRA as an organization has tended to shy away from statistical debates because these are seen as "political" and because of its complicated tripartite make-up. Yet even if the IRRA as an organization is constrained, it can urge its members to become involved in these debates and alert them to ongoing statistical issues. Indeed, this approach was taken in the early 1980s when budget cuts threatened BLS and other agencies. At that time a considerable effort was made by members to reach key individuals in the legislative and executive branches.

IRRA members tend to have a sense of institutions and an empirical tell-me-the-facts orientation which can be useful in the face of political pressures. But for an alliance of users and government experts to occur, there must be effective consultation. Total elimination of union settlement data by the BLS, for example, with only a brief public warning, makes it more difficult to attract support from those IRRA members who relied on such information. Ultimately, IRRA members can help support the official statisticians — but only if they are heard when priorities are set.


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