

Price Indexes, Political Judgments, and the Challenge of Democratic Control

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Abstract

I have argued previously that the construction of cost-of-living indexes (and price indexes more generally) entails choices about methodology that are properly political choices (e.g., Stapleford 2009; Stapleford 2013). Methodological decisions must be guided by a clear set of measurement goals; yet, price indexes have many such possible goals (e.g., Triplett 1983), and even economists frequently argue about the proper objectives (Schultze and Mackie 2002). Insofar as official statistics are used to guide, evaluate, or enact policies, however, then a decision about measurement goals is *de facto* a decision about the policy objectives for the relevant programs. For example, since the U.S. CPI governs cost-of-living adjustments in Social Security payments, conceptual debates about the CPI are in part *de facto* debates about what kinds of economic changes ought to affect Social Security benefits. Of course decisions about policy objectives are political decisions, which implies that methodological decisions about official price indexes ought to be subject to some degree of political control, and in a democracy, some degree of democratic control.

The standard solution to this dilemma allocates the “political” choice of policy objectives and measurement goals to political bodies (e.g., elected representatives) while retaining only apolitical, “technical” choices for government statistical bureaus (e.g., how to reach the measurement goals selected by political representatives). However, by drawing on a number of historical examples, I demonstrate that this solution does not work. Elected representatives lack the expertise to specify measurement objectives properly for statistical bureaus, nor would we necessarily want direct democratic control over statistical methodology. (If every new administration could re-write the entire statistical system according to its own whims, that would undercut the political value of official statistics.)

In this paper, I develop an alternative proposal. Rather than insisting that statistical agencies be apolitical, technical bodies, I argue that they serve a critical political function by sustaining the conditions for vibrant democratic discussion. That role necessitates *political* judgments, but we can distinguish those from *partisan* choices that would in fact damage liberal democratic governance. Having explained this perspective, I sketch its consequences in the case of price indexes, including its effects on the operations of statistical agencies, its implications for the training for government statisticians and other economists, and what it entails for the public understanding of official price indexes.

[The following paper is a draft; one section near the end remains to be written]

[W]e are fundamentally inclined to claim that the falsest judgments...are the most indispensable for us; that without accepting the fictions of logic, without measuring reality against the purely invented world of the unconditional and the self-identical, without a constant falsification of the world by means of numbers, man could not live-- that renouncing false judgments would mean renouncing life and a denial of life.

-- Friedrich Nietzsche, *Beyond Good & Evil* (1.4)

Here in this group we are colleagues who can speak with candor. Let us therefore candidly recognize that statistical truths, like the other truths about man's social life, are created rather than discovered.... [W]hen it comes to unemployment or poverty or price inflation or mental disease, we are dealing with social phenomena. It is man who invents and defines these categories. It is man who selects a few dimensions which are capable of measurement and uses them to characterize complex social conditions and relationships. It is man who decides how much effort should be expended in measuring these dimensions or others which might be selected.

-- Arthur M. Ross, Commissioner of the U.S Bureau of Labor Statistics,
Speech before the Washington Statistical Society, January 1966

Perhaps after a momentary shock, I suspect most statisticians would agree with the sentiments in these epigraphs. Nietzsche claims that statistics are a "falsification," but also that such falsification is "indispensable" for life. In less provocative terms, we might say that for Nietzsche, statistics are *necessary simplifications*. Likewise, Arthur Ross reminds his audience that quantitative simplifications "are created rather than discovered," that the production of statistical knowledge always involves a choice, a choice for which humans (and ultimately, the statisticians) are responsible.

Yet familiar as these sentiments may be, we often do not think deeply about their consequences, especially for official government statistics. If government statistics entail choice, who gets to make those choices and on what grounds are the decisions made? How can the choices made in the construction of official statistics be reconciled with a demand for democratic governance?

In what follows, I will argue that traditional responses to those questions have been inadequate. That does not mean that the actual *practice* of government statistical agencies has gone grossly astray, but rather that the ways in which those agencies have articulated and defended their work have often been inadequate or misleading. Moreover, though official statistical agencies may not need a radical

reform, constructing a clearer vision of their objectives might nonetheless permit them to function with greater clarity and efficacy.

In keeping with the goals of this conference, I will focus my examples and illustrations on the construction of official price indexes (and in particular, on consumer price indexes), yet it should be apparent that the arguments I'm supplying are relevant to the full range of official economic statistics (and indeed to government statistics more broadly). This paper itself is something of a précis for a larger project on economic statistics and democratic governance that I am beginning this summer, funded in part by the U.S. National Science Foundation (award #1430854), and so all comments, criticism, and feedback are very much appreciated.

The Dilemma: A Case Study of the U.S. Consumer Price Index

Every statistician would agree that constructing statistics requires making choices and that those choices ought to be governed by a clear set of measurement goals. You must decide *what* you are going to measure before you can figure out *how* to measure it. When considering statistics produced by a government, however, such choices inescapably take on a political dimension: insofar as official statistics are used to guide, evaluate, or enact policies, then a decision about measurement goals is *de facto* a decision about the policy objectives for the relevant programs. For example, since the U.S. Consumer Price Index (CPI) governs cost-of-living adjustments in Social Security payments, conceptual debates about the CPI are in part *de facto* debates about what kinds of economic changes ought to affect Social Security benefits. Of course decisions about policy objectives are political decisions, which implies that methodological decisions about official price indexes ought to be subject to some degree of political control, and in a democracy, some degree of democratic control.

Yet how should that political control be exerted? The standard solution allocates the “political” choice of policy objectives and measurement goals to political bodies (e.g., elected representatives) while retaining only apolitical, “technical” choices for government statistical bureaus (e.g., how to reach the measurement goals selected by political representatives). In principle, political bodies thus decide *what* to measure, and unelected experts in the civil service can decide *how* to make those measurements without impinging on the prerogatives of democratic governance.

Major guidelines for official statistics implicitly adopt this perspective. For example, the U.N. statement on “Fundamental Principles of Official Statistics” declares that statistics must “meet the test of practical utility” (i.e., address the information and policy concerns of citizens and government) but

that “strictly professional considerations” should determine “the methods and procedures for the collection, processing, storage and presentation of statistical data” (U.N. Economic and Social Council 2013). Likewise, the U.S. National Research Council’s report on *Principles and Practice for a Federal Statistical Agency* declares that the first core principle is “relevance to policy issues” (determined through consultation with various groups) but that agencies must also maintain “independence from political and other undue external influence,” an independence that will grant them “authority for *professional decisions* on the scope, content, and frequency of data compiled, analyzed, and disseminated” (2013, 12, 14, 16, emphasis added). Or again, the Eurostat Code of Practice calls for statistics to “meet the needs of users” while being “compiled on an objective basis determined by statistical considerations” (2011, 6, 4).

On an abstract level, all of these principles are well-intentioned and sensible. Surely statistics should be relevant to users, and surely methodology ought to be constrained by the norms of professional communities. The trouble is that the neat and tidy picture painted by official guides to practice does not correspond with the complexities of actual practice.

The treatment of CPI by the U.S. Bureau of Labor Statistics provides an excellent example. Since its inception during the First World War, the CPI has been linked to efforts to measure the change in the cost of living; indeed, until the late 1940s, it was actually called the “U.S. Cost-of-Living Index” (Banzhaf 2004; Reinsdorf and Triplett 2004; Stapleford 2009). Perhaps not surprisingly, therefore, the current BLS handbook explains that the “framework” for the CPI “is provided by the concept of the cost-of-living index (COLI)” (U.S. Bureau of Labor Statistics 2007). Tracing the footnotes in BLS publications ultimately takes us to Pollak’s (1989) classic treatment of *The Theory of the Cost-of-Living Index*, which defines a COLI as “the ratio of the minimum expenditures required to attain a particular indifference curve under two price regimes” (6).

All of that seems relatively straightforward: the public has asked for a measurement of the change in the cost of living; economists have defined what that means; and the BLS does its best to approximate such a measure. The BLS, in that respect, is following the principles of best practice as outlined by the U.S. National Research Council, the U.N. Economic and Social Council, and so forth. But looking closer reveals a far more complicated story.

As I have argued at some length, Americans have routinely fought about the meaning of “the change in the cost of living,” and the views espoused by politicians, labor unions, and most citizens have rarely corresponded to Pollak’s definition (Stapleford 2009). If one takes the most common formulation – the changing cost of reaching a fixed standard of living – Americans have argued about what

constitutes a “fixed standard of living” in two very different social and economic environments without producing a unified view. Moreover, despite misleading statements by some economists (e.g., Boskin et al. 1996, 20), Pollak’s COLI does not compare the cost of obtaining a fixed level of economic welfare in two different time periods anyway.¹ In a similar vein, many economists have argued that a COLI may not be the most appropriate concept for the different functions served by the CPI (e.g., Triplett 1983; Deaton 1998; Schultze and Mackie 2002; Baily 2006). In short, irrespective of the merits of the COLI framework in the abstract, it is clear that the choice of measurement objectives for the CPI did not result from an informed debate about the policy goals and functions of the index.

What went wrong? Miscommunication is the most obvious culprit. Most non-economists have only a hazy notion of what they mean by “the change in the cost of living,” and the complexity and ambiguity of that phrase can only be drawn out through extended investigation. Nor is the general public usually aware of how economists define a COLI or what the practical ramifications of such a definition might mean. To be fair, economists themselves are often not attuned to these differences, leaving them prone to misstatements (such as the Boskin commission’s claim that a COLI provides the “minimum expenditure needed to achieve the same level of well-being” in two time periods, p. 20) or at least to missing the significant gaps between public intentions and what the COLI framework actually provides.

In principle, these problems can be resolved through education of both the public and economists themselves; in practice, of course, there may be numerous obstacles. At least in the abstract, however, improving communication falls under the ambit of the guidelines for official statistics cited above. To borrow the language of Eurostat, the U.S. CPI is not currently “meet[ing] the needs of users,” in part because users haven’t clarified their precise “needs” and because economists haven’t helped them to do so.

Yet there is a second, deeper problem. Even if communication was perfect – even if citizens could tell government statisticians precisely and clearly what they wanted – statistical agencies would still face a serious dilemma because, of course, not all people want the same thing. Here is the great lacuna in guidelines for official statistics, the elephant in the room: they provide no principles for

¹ Pollack’s index compares the minimum expenditures on a given indifference surface when confronted with two different sets of prices. Although the prices may be (and usually are) drawn from two different time periods, the index itself does not compare the cost of obtaining the same level of welfare in those periods. In fact, it cannot make a comparison between real situations because the consumer’s preferences may have changed in the interim. See Stapleford (2013) for more details, as well as Fisher & Shell (1972).

adjudicating conflicts over the goals of official statistics. What should be done when group A wants the CPI to take one form and group B wants something else entirely?

In a democratic society, the simplest solution would seem to be to resort to democratic control: whichever party wins the most recent election gets to call the shots. Yet such a “solution” carries a myriad of other troubles. In the U.S. case, there is a problem of split control: the BLS is an executive agency (technically under the control of the President), but many of its statistics are used in and for congressional legislation – so where should the agency’s loyalties lie? More fundamentally, if government statistics fell under complete control of the ruling party, they would cease to be of value to minority parties, and the potential for frequent changes in concepts and methods could completely demolish any long term continuity in data, thereby depriving economic statistics of one of their chief benefits: providing a consistent measure of change over time. Statistical agencies seem to be caught in a dilemma. They are faced with a political choice (which group’s demands should take priority?), but the most clear political solution (democratic rule) is unsuitable. How can they proceed?

Trapped in such a bind, it is no surprise that most agencies have looked for decision-making criteria that at least seem to be apolitical. The most common of these, of course, is the community of other experts, a community that (in principle) transcends political parties and specific social or economic interest groups. Hence the emphasis on “professional” criteria in guidelines for official statistics; as the U.N. version declares, “strictly professional considerations” should determine “the methods and procedures for the collection, processing, storage and presentation of statistical data” (U.N. Economic and Social Council 2013). So, rather than asking “What concepts and methods would best fit the myriad of policy functions that the CPI serves?” – a question whose political dimensions would quickly become inescapable – the BLS asks the neater and tidier question, “How do economists define a cost-of-living index?” Yet by sidestepping the original question, this gambit creates the very disjuncture I described earlier: the gaps between the conceptual framework of the CPI, the intentions of policymakers and citizens, and the policy applications of the index.

Maybe we need a different approach.

A New Framework

Let’s start by considering the general functions that official statistics, including price indexes, serve within modern liberal democracies. We can delineate four broad areas:

1. *Administrative tools for the state*: Statistics can serve direct administrative functions in the government, as when the CPI is used to adjust food stamp payments or the U.S. Employment Cost Index affects Medicare reimbursement rates.
2. *Indirect guidance or evaluation of government policy*: This is perhaps the most familiar role for official economic statistics, as when central banks consult price indexes when deciding on interest rates, or when citizens consider GDP or unemployment statistics when evaluating government programs.
3. *Use by individual, non-state organizations*: Again, this is a familiar, albeit more hidden, function: the company that sets pricing or production based on the movements in economic statistics; the informal use of price indexes to guide salary adjustments, and so forth.
4. *Contractual use by non-state organizations*: Economic statistics, and especially price indexes, are frequently used for escalator clauses in contracts. In contrast to (3) – where an organization uses statistics for its own internal purposes – this function involves two distinct parties, and hence has greater scope for conflict.

Note that there are certain similarities among subsets of these four functions. The first two involve the state; the second two deal strictly with non-state entities. Likewise, the first and fourth both involve direct, administrative uses of statistics, whereas the second and third are indirect, containing greater scope for judgment when evaluating and interpreting the significance of statistical results. Not surprisingly, the conflicts over methodology are much more intense for the administrative cases: a central bank that is unhappy with its national price indexes can adjust for the perceived flaws when it analyzes the data; a company bound by a contract has no such luxury.

We can also see that the challenges posed by conflicts over statistical objectives might look quite different in each of these areas. For example, if we consider the first case, *administrative tools for the state*, we might accept direct democratic control much more readily: perhaps the democratically-elected majority ought to determine the conceptual basis for escalating Social Security benefits. On the other hand, democratic control seems far more problematic for the other three uses: policy evaluation would become nearly impossible if the ruling party could rewrite the statistical system according to its own whims, and what organization would agree to a contract knowing that a new election could completely restructure its terms?

Nonetheless, despite these very real distinctions, I believe all four of these specific functions could be grouped under one larger, overriding goal for government statistical agencies: fostering liberal democratic governance. The “democratic” part of that phrase should be clear. By the qualifier “liberal,” I

mean two things. First, the possible actions of a democratically-elected majority are constrained by an underlying set of precepts (typically discussed in terms of “rights”) that are much harder to change and that are protected through other institutional mechanisms (e.g., a judicial system). Second, the state sees part of its role as providing and enforcing a stable framework (e.g., a legal system) within which individuals and organizations can interact, a framework that includes the structural conditions for democratic governance itself. Since I have insisted that statistical agencies are responsible for *fostering* liberal democratic governance, that implies (accurately) that I see these agencies as part of the state’s framework for enabling “the structural conditions for democratic governance.”

It should be evident how this definition subsumes function (2), *indirect guidance or evaluation of public policy*: surely providing the resources for the public to evaluate government policy is a critical component of democratic governance. The connection to function (1), *administrative tools for the state*, may be less obvious – after all, it could imply that statistical agencies owe their primary allegiance to the ruling party rather than to citizens writ large, and in that respect it might be seen to be in tension with democratic governance. But that would be a mistaken inference. After all, any service that statistical agencies provide to a ruling administration or political majority is granted only insofar as those leaders have been democratically elected. In other words, part of “fostering liberal democratic governance” is enabling the democratically-elected majority to rule effectively. Yet, ultimately, the loyalties of a statistical agency lie with the ideals of democratic governance itself, not with a particular administration. (That is why, of course, most posts in statistical agencies are considered civil service positions and are treated differently than direct political appointments.)

Function (3), *use by individual, non-state organizations*, falls under a similar logic: insofar as a democratically-elected majority has authorized an agency to provide data useful to certain organizations, the agency has an obligation to that end. Function (4), *contractual use by non-state organizations*, relates to the “liberal” portion of “liberal democratic governance.” In a liberal society, the government has a duty to preserve the integrity of legal contracts, and indeed not to intervene in such contracts without a compelling reason. When organizations create contracts involving official statistics, an agency thereby incurs an obligation to consider the consequences on those contracts of any changes to statistical methodology, and most definitely an obligation to avoid the fact and appearance of favoring one party over another.

“Fostering liberal democratic governance” therefore subsumes all four primary functions of statistical agencies and thus can serve as an overarching objective in ways that should not be unfamiliar to most government statisticians. Nonetheless, it differs significantly from standard descriptions of

statistical agencies that define their mission as providing “information” to a range of “users.” The U.S. National Research Council is typical in this regard, stating that “statistical agencies must...provide objective, accurate, and timely information on the subject area(s) in their purview that is useful to a broad range of private- and public-sector users as well as the public” (2013, 12–13).² Such statements routinely recognize the importance of function (2) above – i.e., that such information is essential for democratic assessment of government policy. Thus the vision statement for Eurostat declares that its statistical system “constitutes an essential basis for democratic processes and progress in society” (2011, 1).³ However, because the overall objectives for statistical agencies are couched in terms of providing “information” to various “users”, those objectives can provide no guidance for how to adjudicate between competing demands from users. The vague comments from the U.S. National Research Council are exemplary in their unhelpfulness: “To establish priorities..., a statistical agency must engage with a broad spectrum of users in state and local governments, businesses, academia, and other sectors” (2013, 13).

Furthermore, unlike standard mission statements for statistical agencies, “fostering liberal democratic governance” is an unabashedly *political* goal. In contrast to the limited, economic vision of statistical agencies (producers creating information for various consumers), it insists that statistical agencies are fundamentally political entities with a particular political mission: to cultivate and sustain a specific form of governance. Most statistical agencies have an aversion to word “political,” which they invariably seem to equate with “partisan.” Thus when “political” appears in guides to practice, it is always something to be avoided. Thus the fourth principle from the U.S. National Research Council states that agencies must maintain “independence from political and other undue external influence” (2013, 14).

Of course, these guidelines are right to insist on impartiality and non-partisanship as goals for statistical agencies. But by equating “political” with “partisan,” they are thereby driven to accept the economic model of their work (a producer providing information for customers), a step that ironically leads them into an egregious double-bind. Consider: on the one hand, an agency is supposed to create information for various users. Yet often the users will demand different things. The agency must therefore prioritize among these demands. At the same time, though, the agency has been told to be

² Similarly, consider the mission statement of the European Statistical System: “We provide the European Union, the world and the public with independent high quality information on the economy and society on European, national and regional levels and make the information available to everyone for decision-making purposes, research, and debate” (Eurostat. European Statistical System Committee 2011, 1).

³ Cf. similar statements from the U.S. and the U.N.: (National Research Council. Committee on National Statistics 2013, 11; U.N. Economic and Social Council 2013, 2)

“impartial,” that is, not to favor one set of users over another. Thus it is caught in a paradox: prioritize one set of demands without favoring one user over another.

Naturally, the only way out of this paradox is to base the decision on some external criteria that will avoid the appearance of favoritism. Almost invariably that has meant grabbing some recommendation from an expert community (tacitly assumed to be “non-partisan”). Hence the emphasis on following “professional” standards in guidelines for statistical practice; hence the kinds of lacunae discussed above for the CPI: a failure to consider the applications for the CPI and to have a cogent debate about the concepts and methods of the index in light of those applications. Such a conversation cannot be held because it will be inherently political, and official statistics are not supposed to be political, etc., etc.

I suggest that we can start to cut through these knots by reorienting our vision of statistical agencies; they are not state-owned producers creating information but political entities that exist to foster liberal democratic governance. That new vision creates two helpful lines of inquiry. First, having identified a central goal for statistical agencies, we can start to ask what qualities must someone possess in order to be an excellent government statistician? Certainly, that list would include specific knowledge and technical skills. But it might also encompass certain personal qualities or dispositions (cognitive, emotional, or behavioral), the sorts of things that have been traditionally labeled “virtues” and that are now part of a revitalized literature in both ethics and epistemology [cite]. I am pursuing such questions within my larger project, but I won’t take them up here.

The second line of inquiry relates more overtly to the challenges we have been considering. Whereas what I’ve called the economic model of a statistical agency (information-provider) offers no clear guidance for setting priorities or choosing goals for specific statistics, our new political vision does suggest a series of heuristics. I call these “heuristics” rather than “rules” or “principles” because they offer guidance rather than iron-clad law mandates that must be followed in every instance.

Indeed, the inadequacy of formal rules supplies one of the core justifications for virtue ethics and virtue epistemology, and it marks the intersection between the first line of inquiry I described and the issues I take up below. Virtuous statisticians are necessary precisely because one is dealing with heuristics rather than formal rules; the excellent statistician is one who can apply the heuristics appropriately in a given situation. In that respect, a full solution to the dilemma sketched earlier would require delineating both the heuristics and the virtues – only then can one see how they might function together as a system. However, given the constraints of space, I’ve chosen to concentrate on several key

heuristics in this essay. In order to give some sense of how these might work in practice, that overview is followed by a set of case studies focused on the BLS and the U.S. CPI.

Heuristics for Government Statistics

Before continuing, a few caveats are in order. First, this is not intended to be an exhaustive list; instead, I've focused on four key heuristics that can illuminate the tensions around democratic control over official statistics. Second, keep in mind my comments about the distinction between heuristics and rules: you may readily recognize situations in which these heuristics may not be ideal. That's perfectly fine; these are rules of thumb, and that is all. Finally, and on a related point, you will recognize that these heuristics are not sufficient to determine action in-and-of- themselves; they provide guidelines, not a full-fledged decision-making calculus.

1. Within the four functions of government statistics, primacy goes to indirect evaluation of government policy (Function #2).

As noted above, function (2) has the closest, most direct link to democratic governance. If citizens lack the information needed to assess the work of their elected leaders, then democracy is threatened at its very core. (Indeed, that is surely why the official codes of practice cited above all make special mention of this second function.) Nonetheless, that does not mean that all of an agency's resources should be dedicated to function (2); it is the primary, but not the exclusive, goal for statistical agencies. It serves as a reminder that sustained, systemic ignorance can endanger the very possibility of democratic life.

2. A commitment to supporting the evaluation of government policy (Function #2) entails creating or enabling multiple versions of core statistics.

If citizens need to evaluate government programs along the dimensions that are most meaningful to the citizens themselves, it follows that different groups of citizens may have different measurement goals for government statistics. In turn, if government agencies are to foster democratic debate, they have an obligation to supply multiple versions of core statistics so that (ideally) each group could have a set of data covering the issues and embodying the perspectives that are most meaningful to them.

Naturally, this heuristic raises a host of practical questions: Who delineates these "groups"? How finely are the distinctions drawn (since, in principle, every citizen might have different goals), and how are these preferences discovered? Who gets to decide what constitutes "core statistics"? What about international standardization? Again, I'll reiterate that these are heuristics. Rather than providing

pat answers, they sketch a framework and priorities for making decisions. In this case, the heuristic shifts us away from an emphasis on definitive versions of statistics and toward a pluralistic approach.

3. Statistical agencies should rely on existing institutions and organizations to mediate democratic influence over government statistics.

Fostering liberal democratic governance entails drawing on the institutions and organizations that have already been established as part of the existing democratic, social, and economic processes in a country unless there is compelling reason to circumvent them. We can see now how this heuristic intersects the second: existing political institutions (e.g., legislatures), political parties, and other political or economic organizations form the groups that can mediate citizens' influence over government statistics. Although that may seem intuitive, it runs counter to certain claims in the literature on democracy and expertise from science & technology studies. A range of scholars have argued for increased citizen participation in decisions involving science and technology, a transformation that demands novel institutional forms that can promote a more active "deliberative democracy" or "participatory democracy" to counteract growing reliance on technocratic expertise (e.g., Kleinman 2000; Maasen and Weingart 2005; Rogers 2008; Fischer 2009; Callon, Lascoumes, and Barthe 2009). While not disputing the need to reinvigorate contemporary democracy, there nonetheless seems to be a tension in asking state bureaucracies to impose novel mechanisms for democratic control. To put it differently, it is not the task of statistical agencies to reinvent the processes for democratic rule but to use existing means.

4. Statistical agencies must encourage liberal democratic governance.

The final heuristic is the least obvious and therefore the most curious; it will also turn out to be the key to untangling the fundamental dilemma described earlier. In this context, "encouraging liberal democratic governance" does not mean running pro-voting campaigns or distributing educational literature on the importance of citizenship; it means battling against the unrelenting efforts to use the power of government statistics to bypass or suppress the conflicts of a liberal democracy. For indeed democracy tends to destroy itself. The cumbersome nature of democratic processes, the messy and unsatisfying qualities of democratic debate, indeed the potential lack of wisdom or justice in democratic decisions – all serve as tantalizing temptations to bypass democratic rule.

Although it is fair to say that statistical agencies were created to enhance democratic rule by providing necessary information to a country's citizens, it is equally true that proponents hoped to reduce conflicts between competing groups by creating a shared groundwork of accepted knowledge.

Many advocates for creating the U.S. Bureau of Labor Statistics in the 1880s, for example, hoped that data gathered by the bureau would resolve contentious arguments over tariff rates, and others championed its potential to ameliorate the bitter debates surrounding the “labor question,” an amorphous set of nineteenth-century concerns about inequality, wage labor, urbanization, and immigration (Stapleford 2009, 24–31).

Accordingly, there has always been a lingering temptation to use the power of official statistics either to suppress conflict or gain a tactical advantage. Activists seek to silence dissent by touting allegedly apolitical government data. Politicians try to avoid controversial choices by treating them as non-partisan, technical calculations. Companies and labor unions push for advantages in contracts that use government statistics by altering (or protecting) statistical methodology, insisting that their positions arise from neutral assessments.

The common thread in each of these situations is a desire to conceal political judgments within statistical calculations rather than to debate them transparently. Confronted with such challenges, and recognizing the political stakes, government agencies have tended to retreat to “professional considerations,” to tacitly accept the bargain handed to them by competing groups (statistical calculations are apolitical) and to scramble to find rationales that fit that model. I argue, on the other hand, that agencies should refuse to play this game, that instead they should continually, repeatedly, and actively uncover the political choices within calculations and force competing groups to confront those choices directly. By doing so, statistical agencies will *encourage liberal democratic governance*.

A few examples from the history of the U.S. CPI will illustrate what I mean.

Case Studies in Statistics and Democratic Governance: The U.S. Consumer Price Index

1. The U.S. Cost-of-Living Index in the Second World War

By far the most prolonged, public, and heated battle over the U.S. Consumer Price Index came during the Second World War, when it was known as the “U.S. Cost-of-Living Index.”⁴

The Context:

During the Second World War, most major U.S. labor unions agreed to forego official strikes in favor of arbitration by the National War Labor Board (NWLB). Although the board had a tripartite membership (labor, business, government), in practice the government representatives had the final control. In the spring of 1942, the NWLB began limiting wage increases using a formula linked loosely to the BLS Cost-

⁴ The account that follows is drawn from my own analysis in Stapleford (2009, 184–252).

of-Living Index.⁵ Within a year, labor unions had begun to criticize the BLS index, insisting that the true rise in the “cost of living” was much higher.

Businesses, naturally, opposed the unions. Within the government, opinions were mixed. On the one hand, the Roosevelt administration (which had appointed the NWLB) was generally sympathetic to workers. On the other hand, clauses in many war contracts tied payments to wages, meaning that raising the wage limits would boost the cost of the war. Moreover, government officials worried that raising wage limits would lead to an inflationary spiral that would threaten stability and the war effort as a whole. In private, top BLS officials criticized the NWLB’s decision to link wage limits to the Cost-of-Living Index, believing that it was unsuitable for that role. At the same time, they resented union attacks on their work, feeling that the complaints were riddled with mistakes and misunderstandings. The problems, in their view, lay with the NWLB and not with the index.

What Happened:

The full history of the controversy over the index is more complicated and convoluted than can be described here. Generally, however, the BLS defended its work by appealing to professional standards. For example, good professional practice precluded estimates for factors (such as quality deterioration) where data was not available. Likewise, the concept of a “cost-of-living index” should be determined by the predominant view among American economists, namely that it measured the changing costs of a fixed basket of goods and services. Labor unions rejected both of those positions, and indeed went so far as to calculate their own alternative index. The government members of the NWLB supported the BLS and, like the agency itself, turned to the professional community of economists for justification, in this case a three-person “technical committee” led by the American economist Wesley C. Mitchell. The wage limits were not raised.⁶

Although the BLS “won” its dispute with the unions in the sense that both the NWLB and most professional economists defended its work, with some qualifications, that victory came at a severe cost. The bureau’s public reputation remained strong among social and cultural elites, but it took a beating in among other communities. Many union officials were furious at the BLS, a rupture that was only healed

⁵ Formally, wage increases were limited to 15% over January 1941 levels, an increase that matched the rise in the index between that date and the spring of 1942. However, the board hinted that the limits would be raised if the index moved significantly higher. Much of the subsequent arguments from unions were intended to show that the true rise in the cost of living was well beyond 15%, necessitating a revision in the wage limits.

⁶ The final committee report on the controversy contains documents from each of these groups. See U.S. Office of Economic Stabilization (1945).

through the (*de facto*) ouster of the acting BLS commissioner, Ford Hinrichs, who left the agency in 1946. Most certainly, the episode was not a shining example of liberal democratic governance.

What the BLS Might Have Done:

Historians are generally loathe to expend energy judging the past and considering what individuals might have done differently. Such exercises can seem pointless (the past cannot change) and unfair (it's all too easy, free from the pressures and obscurity of the moment, to suggest what someone ought to have done). Indeed, in our case, the very heuristics which I am using are a result of reflection on historical events; it would be absurd to assess the actions of people in the past against standards developed from consideration of those very events. Nonetheless, for the purpose of *illustrating* the heuristics (rather than judging protagonists), counterfactual examples can be effective.

Methodologically, the controversy hinged on two key issues: what was the appropriate concept for a “cost of living index,” and how should one treat a variety of factors (quality deterioration, shortages, etc.) on which there was little concrete data. Politically, and ultimately most fundamental, the real question was how should workers’ compensation be adjusted to account for wartime social and economic changes? The methodological debates – the overt face of the conflict – were in fact a proxy for the struggle over the political question. Unfortunately, decoupling the two questions allowed what should have been a political argument to be clouded by irrelevant factors (how have American economists defined a “cost-of-living index” in the past?) and indeed prevented a clear and transparent debate.

Instead of defending its methodology based on “professional considerations,” the bureau might have said something like the following: “Look, there are multiple ways of defining the ‘change in the cost of living.’ You (the NWLB) need to specify precisely what you have in mind, and then we can work to measure it. Moreover, there may be some factors for which we have limited data; you need to decide how you’re going to handle that.” That is precisely what I mean by *encouraging liberal democratic governance* – forcing debates into the open and back to the mechanisms and institutions intended to handle them.

Such a debate probably would not have produced a dramatically more favorable outcome for the labor unions; the government members of the NWLB had no intention of raising the wage limits. But by refusing to allow the NWLB to treat the discussion as a politically-neutral problem of measurement, the BLS would have placed the burden back where it belonged and avoided becoming a scapegoat. In fact, other factors suggest that unions would have looked far more favorably on the BLS had it taken

that path. For example, union officials had a positive view of an earlier report from a committee of the American Statistical Association that had noted the ambiguity of the phrase “cost of living” and had suggested that the BLS index might not be appropriate for adjusting wages (Mills et al. 1943). Likewise, labor unions’ deepest antagonism to the BLS (and Hinrichs in particular) came from what they perceived as the bureau’s unwillingness to entertain other conceptions of what a “cost-of-living index” might be (Stapleford 2009, 214–217, 250–252). By accepting the NWLB chairman’s delineation of methodological choices as apolitical decisions, the bureau trapped itself in an untenable position.

2. Labor Contracts and Debates over CPI Methodology

This example takes up the fourth function of official statistics (contractual use by non-state organizations), and shows how the BLS successfully navigated a tense situation by creatively forcing a power struggle back where it belonged—between unions and companies—rather than accepting responsibility for adjudicating the conflict.

The Context:

Beginning in the late 1940s, a number of major labor unions had signed multi-year wage contracts that included cost-of-living-adjustment clauses (COLAs) tied to the CPI. Naturally, companies and especially unions began to peruse the details of BLS methodology and raise arguments about perceived weaknesses. One of the early tests (1948 – 1949) came with the rent component of the CPI. Because new, higher-priced rental units were linked into the index, union officials complained that the index had a downward bias.⁷ The BLS agreed there could be a problem, but they had only limited data with which to calculate the extent of the problem. What should be done?

Unions wanted the BLS to include an estimate of the effect in the actual index. Business groups opposed that move, which of course would raise wage rates because of the COLA clauses. Instead, they argued that the bureau should leave the actual index alone and publish a separate article describing the problem and the preliminary data. In discussions with both groups, BLS staff also proposed two other

⁷ The index was calculated as a chain index. When new units entered the index sample, the bureau simply compared the prices of those units in the current month to their prices in the previous month. Thus, although the new units might have significantly higher prices than older units in the sample, that price difference would never affect the level of the index. In theory, one might hypothesize that the higher prices of the new units reflected higher qualities, and hence linking them into the index would pose no serious problem. (Indeed, that was the bureau’s general rationale for this procedure.) But because national and local rent control laws limited the rental rates of old units (while, beginning in 1947, new units could be introduced at higher rates), that logic broke down – there might be no significant quality difference, and yet the older units might have significantly lower rents because of rent control.

alternatives: refer the problem to a committee of the American Statistical Association (ASA) or add a footnote to the index that would describe the problem and include a rough estimate (a procedure that had been adopted near the end of the war). Business representatives vehemently rejected the footnote option; labor unions grudgingly endorsed it if, and only if, the bureau refused to incorporate the estimate into the index itself.

What Happened:

In a fascinating memo to the Secretary of Labor, BLS Commissioner Ewan Clague laid out the possible courses of action. He argued that including an estimate into the actual calculation would violate the norms of official statistics, but deemed the other three alternatives (footnote, separate article, or ASA committee) “technically defensible.” He viewed the ASA committee (the typical retreat to the professional community) as “the soundest alternative” in the abstract, and noted a “majority” of BLS staff favored publishing a separate article. Clague himself, however, recognized public pressure on the bureau to act and felt that if the Secretary wished action to be taken immediately, the best choice would be a footnote plus a more detailed article to be published later.⁸ In the end, the bureau opted for the footnote.

Analysis:

In this case, the bureau faced a challenge to *liberal governance*. Any change to the index methodology would affect a contract signed by two powerful non-state organizations, necessarily favoring one over the other. There was no dispute over the concept for the index in this example; the trouble was deciding what to do when faced with an acknowledged error of unknown extent. Clague rightly perceived that incorporating the estimate directly into the index would violate traditional norms. It could create a new problem (what other estimates ought to be included in the calculation?) and it would open the bureau to a charge of favoritism: the agency would in effect be altering the terms of a contract in a way that favored unions.

One could conceivably argue that the government had a duty to redress the imbalance of power between unions and companies by supporting the former. Certainly unions saw the situation in that light: during debates about a revised version of the CPI in 1952, union statisticians recognized an “inconsistency” in the principles that they were applying at different point, but decided that “since there

⁸ Ewan Clague to Maurice Tobin, 18 May 1949, CPI—New Unit Bias, General Correspondence & Subject File, 1934 – 1950, U.S. Bureau of Labor Statistics, RG 257, U.S. National Archives II, College Park, Md.

is probably little hope of correcting all of the past inequities that have worked against our people, we can insist on one little inconsistency that operates in our favor.”⁹ However reasonable that might be, Ewan Clague had neither been elected nor appointed to adjudicate the struggles between unions and companies; for the bureau to adopt changes deliberately to bolster unions (however well intentioned) would be a violation of liberal democratic governance.

Settling on the footnote, by contrast, was a brilliant maneuver. Clague avoided a direct intervention to the contract; at the same time, by embedding the discussion of the problem in the monthly report itself, he signaled the seriousness of the issue and made it impossible to ignore. In effect, Clague had pushed the conflict over wages back where it belonged: between the unions and companies. Indeed, the footnote strategy drove the two sides to return to the bargaining table. By that fall, the United Auto Workers (the main union involved) had convinced General Motors to add a 0.8 adjustment to their COLA formula to account for the rent bias.

The bureau’s arrangements with unions and companies during the early postwar era did not always promote liberal democratic governance to the same extent. As I have argued at some length (Stapleford 2009, 253–291), unions, companies, and the BLS all promoted a public image of statistics as objective facts even as they struggled intensely, sometimes bitterly, to shape CPI methodology behind the scenes. That peculiar dynamic arose from Cold War pressures in which both labor and management found it beneficial to portray wage rates as deriving from rationalized, economic calculations. Yet, as in this episode, Ewan Clague often displayed both creativity and a keen political sensibility that allowed the bureau to navigate treacherous situations successfully.

3. The BLS, Indexation, and the Boskin Commission

For our third example, we return to another missed opportunity connected with the first function of official statistics (administrative use by the state), this time by Congress rather than an executive agency.

The Context:

Beginning in the early 1960s, the U.S. Congress began establishing automatic escalator clauses in a variety of federal programs that linked benefits, payments, or eligibility thresholds directly to movements in various statistics, especially the Consumer Price Index. By 1980, the Congressional Budget

⁹ George Burt and Pat Patterson, “Rough Draft: Change in Index Base and Effect on Escalators,” 28 April 1952, pp. 7-8, folder 17, box 6, UAW Research Department, Walter Reuther Library, Detroit, Mich.

Office estimated that such “indexation” tied the CPI directly or indirectly to roughly half of the federal budget, affecting everything from Social Security benefits to civil service retirement plans to payments for food stamps (Weaver 1988, 1). Naturally, that meant the methodological questions surrounding the CPI could have substantial consequences for the federal budget, and such issues repeatedly attracted lawmakers’ attention, especially in the early 1980s and the mid-1990s. In 1995, the U.S. Senate Finance Committee held hearings on an alleged upward bias in the index and appointed a five-member committee of economists, chaired by Michael Boskin of Stanford University, to investigate. The Boskin committee reported that the CPI did indeed have a 1.1 percentage point upward bias each year, an overstatement that would add almost \$700 billion to the federal deficit over the ensuing decade (Boskin et al. 1996, 1–11).

What Happened:

The BLS accepted the committee’s fundamental assertion that a constant-utility index (what economists typically call a COLI) ought to be the guiding concept for the CPI, though they limited the domain of the index to market goods and services or government goods with explicit fees. However, the agency argued that any bias was significantly less than the committee’s estimate, and it disagreed with several specific recommendations (U.S. Bureau of Labor Statistics 1998; Johnson, Reed, and Stewart 2006). Though some outside economists raised questions about the proper concept for the index in light of its applications (e.g., Deaton 1998; Baker 1998; Schultze and Mackie 2002), the bureau itself consistently framed its discussion as a technical consideration of how to approximate a COLI, without considering the policy applications of the index. Congress made no direct moves to alter its indexation formulas or demand an alternative version of the CPI.

What the Bureau Might Have Done:

As in our first case, the BLS could have pointed out that there are multiple, *legitimate* ways of defining the “change in the cost of living,” and that Congress (or an appointed committee) needed to hash out what its members had in mind before assessing BLS methodology. Of course, that was precisely the conversation that senators wished to avoid: as Kent Weaver recognized (1988), avoiding blame has been a primary factor in the politics surrounding indexation. Cutting Social Security benefits is exceedingly unpopular; as Senator Alan K. Simpson (R-Wyoming) put it glumly at the end of 1995 hearings on the CPI, “Where we have to go politically, no one wants to go politically” (U.S. Senate. Committee on Finance 1995, 103). How much nicer to mask a controversial policy choice under the cloak of an apparently

neutral measurement problem! “This is so profoundly important,” Senator Daniel P. Moynihan (D-New York) declared during the hearings, before concluding contentedly, “and so politically neutral” (U.S. Senate. Committee on Finance 1995, 35).

By accepting the Finance Committee’s implicit contention that measuring the change in the “cost of living” was an apolitical task, the BLS missed an opportunity to encourage liberal democratic governance by forcing the senators to confront the very issues they were eager to avoid: for what kinds of economic and social changes should Social Security recipients be compensated? Although other authors posed this question (e.g., Madrick 1997; Schultze and Mackie 2002, 199–206; Baily 2006), and even two members of the Boskin commission (Zvi Griliches and Ellen Dulberger) raised it in individual testimony (U.S. Senate. Committee on Finance 1995, 85–88, 121, 131), the BLS did not take up the issue. For the very reasons discussed earlier in this paper, the BLS is reluctant to emphasize the political dimensions to constructing official statistics—but the result is an impoverished democratic life.

[TO ADD: A hypothetical situation in which the BLS is forced to choose how it will allocate resources in the face of competing demands]

Conclusion

Standard codes of practice for statistical agencies promote a separation between political judgments and technical decisions, with only the latter falling under the purview of agencies themselves. While well-intentioned, such guidelines often founder in practice when combined with the common vision of official agencies as impartial producers of information who ought to satisfy the needs of various consumers. Such mandates trap agencies in a paradox: they must “impartially” choose between incompatible demands of competing groups. The typical response to this dilemma has been to retreat “professional” criteria – i.e., the traditions or consensus views of some part of an expert community. As a result, conflicts are masked or suppressed rather than being addressed openly.

Instead, I have suggested an alternative model in which government statistical agencies understand their mission as fostering liberal democratic governance. That entails providing necessary information for democratic debate and for negotiation or private action within a liberal regime. Yet it also means encouraging liberal democratic governance and resisting efforts to suppress democratic discussion or to enlist the power of the state outside of democratically-established channels. By adopting this understanding of their mission and by developing relevant heuristics (such as those discussed above), I argue that government agencies can more effectively serve liberal democratic life.

Such an approach does not supply a simple, pat set of rules to follow. Nor does it promise to keep statistical agencies free from controversial situations. On the contrary, it demands judgment and creativity, plus vigilant attention to competing ideas about statistics and the political stakes of methodological debates. Yet it provides a clear set of goals for agencies, and thereby provides grounds for rational discussion and debate about possible courses of action. Moreover, unlike current models, it enhances rather than hinders democratic debate.

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