

# Trust and the U. S. Statistical System — II

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**J**anet Norwood recently described her prescription for reinventing the Federal statistical system (Norwood 1993a). In a subsequent talk to the Washington Statistical Society, she elaborated on the need for increased statistical literacy and on her ideas for a more centralized and standardized system (Norwood 1993b). This paper is a continuation of the dialogue she began.

## ■ Title and All That

Norwood's talk last April was entitled "Trust and the U.S. Statistical System." I'd like to begin by looking at the pieces of her title and connecting them up with each other and the reality we know:

- **Trust.**— The word trust is exceedingly well chosen by Norwood. It is a simple word, rich in emotional content and fits my approach to the underlying issues very well, indeed. There is no doubt that we also need to talk about greater efficiency, relevance, timeliness, responsiveness and so on, but these other ideas, important as they are, don't represent to me an ultimate goal of the Federal statistical system. Trust, on the other hand, does; it goes right to the heart of the (implicit) social contract we make as public servants when engaged in "official statistics."
- **U. S.**— As I recall, Norwood limited her comments to the Federal agencies. I follow her example, so that my remarks can have focus today. But why not talk about the combined U.S. Federal-state system? In my opinion, it's fair to ask for this talk to be titled "Trust in Government Statistical Systems." Lorraine Amico has made an important case for taking this broader perspective (Steering Committee of the State Information Policy Consortium 1993).

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- **Statistical.**— This word is here primarily because the activities we are discussing have in common one or more of the statistical paradigms. Prominent among these is the survey-taking paradigm. For example, the top eleven Federal statistical agencies are all major users or developers of large-scale household or establishment surveys. Interestingly enough, the employees — even in the major statistical agencies — are primarily **non-statisticians**. This multi-disciplinary aspect of "statistical agency" work will be important in part of what I will say later.

- **System.**— The word "system" needs to be in quotes. As Norwood noted, there really is not a clearly defined structure for the work done collectively by even the major agencies. Gaps exist in some places; apparently needless overlaps in others. Maybe the lack of a real system is the reason this dialogue is even needed today.

## ■ Today's Talk

### *Organization*

The title of today's talk, thus, lays the groundwork for my remarks. In the remainder of this paper, I will focus on five main points:

- **Purpose.**— What does it mean to have trust as a purpose or a goal? How does such a goal connect up to what is or ought to be our day-to-day life as "official statisticians?"
- **Problem.**— What is the problem? Why do we have a lack of trust in the "system?"
- **Privacy.**— There are other values and rights besides trust that official statisticians need to respect and adhere to. Privacy is one of these and, so important, that it needs to be discussed on its own.

- **Process.**— What **process** should we use to address our concerns? Specifically, what deeds do we need to begin doing? My approach will be to apply modern quality ideas. Don't be fooled by my specific suggestions, though; **if you don't like them, use your own.** What is key is that we focus on means and not just ends. **In the end and along the way, it is the means which will justify and define the ends.**
- **Proposed solution.**— Finally, what preliminary **prescription** do I offer? How should we restructure the Federal statistical system — or, indeed, make it more of a "system?" Norwood offered centralization among her options. She may be right. But, as you will see, I'm going to propose something different — something that builds more directly on our existing structure.

### *Comparison to Norwood's Views*

Norwood covered all of the same major issues that I will address today. She was particularly convincing in making the case that the statistical system does have major problems; she even enumerated many of them. In fact, we are both in almost complete agreement here; hence, I intend to follow her broad outline, only adding a few details.

On the other hand, we are not in complete agreement on how to handle privacy concerns. Furthermore, Norwood did not discuss process issues in the way I will. Instead, her focus was mainly on political aspects, in Congress and the Administration — something it is not my place to comment on, since, at least for now, I'm still a government civil servant. (Norwood retired from a distinguished career in Federal service a couple years ago.)

Finally, what do I propose as a solution? Janet Norwood offered centralization and gave lots of specifics about one way that centralization might work. I'm going to prescribe something different here, building, again, on the notion of trust — this time a structure of trust, to be adopted within the current system.

The Japanese word for what I have in mind is "keiretsu." A bad English translation of this word is "group." However, we are talking, when using the word keiretsu, about a very special meaning or kind of group.

I'm going to stay with the Japanese word, therefore, for several reasons:

- To show respect to the originators of the idea;
- To show that there is a lot of depth to the idea — after all, it's not just poetry that can be lost in translation, it's also meaning;
- To emphasize that, even though everything I say about keiretsu may have echoes in your experience, there really is something new here.

On the other hand, I don't want to oversell what is new. After all, there is a lot about it that is not new. Indeed, in many ways, a full keiretsu implementation in the Federal statistical system would be more natural and more in keeping with our existing traditions than centralization. After all, our decentralized system already is built on a strong interlocking set of relationships that, at bottom, are based on trust, not just on habit.

### ■ **Trust as a Goal**

Before we get into the specifics of what exactly keiretsu is and how I see it as a force to restructure our statistical system, let us think for a minute about trust as a goal. What do we mean by "trust?" Maybe for most of you it is belaboring the obvious to try to define such a simple everyday word, but here goes anyway...

Among the dictionary definitions —

Trust is....

- ◆ Reliance on the integrity, justice, etc. of a person, or on some quality or attribute of a thing; confident expectation;
- ◆ The state of being relied on or the state of one to whom something is entrusted;
- ◆ The obligation or responsibility imposed on one in whom confidence or authority is placed.

(As the talk goes along, you'll have to decide for yourself if I've been consistent in my meaning and if my use of the word fits with one of the — many? — meanings you have in mind.)

How do you obtain trust? What is it that makes for trustworthiness? Trust is not a binary attribute; it can be a matter of degree too.

According to extensive research (e.g., Carlisle and Parker 1989), being trustworthy boils down to achieving one simple thing —

### ■ Reliably Doing What You Say You Will Do

Now, there is no mystery in this statement; on the other hand, to actually achieve trustworthiness is extremely difficult — achieving it completely may even be impossible.

The idea of **reliability**, one familiar to us as statisticians, is crucial. Issues here involve the great variability in the quality of the outputs from the statistical system. Sadly, too, we are likely to be judged by the least common denominator, not by our best work.

The **doing** is crucial, of course, but the perception of “doing it” is also critical. Here, media concerns are important, for example. If we are perceived as doing something dishonest or untrustworthy, even if it is perfectly legitimate and legal, it will certainly affect our results.

Finally, the contract aspects around “what you say you will do” require a lot of discussion. Right now, we don't have a lot of data about what the American people really want from us. This makes me uncomfortable and leaves the considerable talents of the statistical system open to, perhaps, undue influences of narrow interests. As pointed out in the floor discussion, what is often suitable for one customer, may not meet the needs of another. So, how do you reconcile these differences and still “reliably do what you say you will do?” To try and answer that question, let's first consider the problem, and then look at the process I prescribe to “solve” it.

### ■ Something About the Problem

The fundamental problem is how to improve the U.S. statistical system. Norwood, in her talk, focussed on *The*

*Economist's* rating of government statistical operations, which showed Canada first and the U.S. quite a bit further down the list — at seventh (*The Economist*, 1991).

Now overall comparisons like this one are worthwhile as a spur to action — “proof of the need” to do something — but it is not clear what actions to take (e.g., Juran 1988). For example, there are many aspects of our decentralized statistical system where we can hold — or more than hold — our own; i.e., **where we are still the best in the world.**

Permit me, for example, to cite some small illustrations close to my own experience: the use of tax return statistics for policy analysis would be a place where we are at least keeping up with what is being done elsewhere in the world (Scheuren and Petska, 1993); on the other hand, in another area I'm also knowledgeable about — the statistical uses of administrative records — we are well behind not only Canada, but a number of European countries (and perhaps Japan too). So, while my view may not be as pessimistic as Janet Norwood's (or at least *The Economist's*), there is clearly room for the system to improve.

Let me talk about systemwide problems in terms of relationships. After all, if our fundamental concern is trust, then we need to focus on the relationships where trust should exist but does not — **at least not to the degree wanted.** Among these relationships are those with —

- **Customers**, i.e., the American people. I suspect that there would be considerable agreement with the criticism that the public should be getting more for what they are paying.
- **International competitors** and peer organizations. Again, some would say that our lack of humility and slow rate of **organizational learning** are major barriers to needed change.
- **Employees** — here the criticisms are the harshest. You hear them regularly when our young and not so young employees are being candid. Many of them feel victimized by antiquated bureaucratic structures that do not reward **creativity** and human capital investments.

- **Interagency cooperative efforts** — again, a convincing case can be made that interagency cooperative efforts are neither valued enough, nor common enough, in either fact or appearance.

Undoubtedly, the list could be longer, but maybe I've hit on some of the major criticisms, especially as they relate to aspects of trustworthiness, both internally and externally. I don't want to overemphasize these criticisms, but they have some validity. On the other hand, we probably could cite hundreds (even thousands) of cases where we are reliably doing what we committed to do.

Sadly, though, probably every one of you can think of cases where the opposite is also true. Fairly or unfairly, to be trusted the government system, as a whole, must be doing reliably all it promises to do. Fine distinctions between agency efforts are not generally made — especially not outside the Beltway. All of us get lumped together — in many cases, as part of that costly inefficient, and ineffective government that the politicians keep running against. Without a doubt, we need to take a **proactive** role in changing the facts and the perception of the facts. On that point, I hope all of you agree.

## ■ Privacy and Trust

One area in which the perception of trust is key is that of privacy. Statistical agencies have long made and kept pledges of confidentiality. (Privacy "rights" for respondents and other subjects of statistical enquiry have a different character and may be an issue if record linkage approaches are used as a way to gain greater efficiency in the statistical system.)

Now, like many other topics covered today, privacy deserves a complete session by itself. My focus will be to define "privacy" briefly and to connect it up to the idea of "trust" — in this case, the trust that comes about by keeping promises to respect the privacy rights of statistical subjects.

Let's begin, as we did with trust, by referring to a standard source for a definition. Among the meanings of privacy we find —

**Privacy is the state of being private, as in:**

- ◆ Belonging to some particular person;
- ◆ Removed from or out of public view or knowledge; secret;
- ◆ Not open or accessible to people in general.

Janet Norwood has advocated that, among the advantages of a centralized statistical system, we would be much better able to carry out record linkage among existing (or new) data collection efforts — thus gaining valuable data at a very modest expense. A standard pledge of confidentiality would be given. This is not the same kind of pledge:

**Confidentiality is the state of being confidential, as in:**

- ◆ Spoken or written as a secret or private matter;
- ◆ Not to be divulged or communicated to others;
- ◆ Privileged against disclosure.

On the other hand, though, how about privacy? Well, to discuss this let me divide my remarks into four areas:

- **Social Contrast Issues.**— I have long been advocating and sponsoring research on how willing people are to give up their privacy rights for the sake of the common good (Kilss and Alvey 1985). I would like at some future time to discuss these results, especially, the need for constructive testing in real settings (e.g., the Current Population Survey or the Survey of Income and Program Participation) of the voluntary informed consent aspects

— particularly for linkages of surveys to administrative records.

- **Legislative Issues.**— Legislation is pending on allowing more linkages of data and sharing among statistical agencies for data originally collected for statistical purposes. The evolution and enactment of this legislation should require an **ongoing** study of the privacy issues, so that the agencies involved do not become removed from the views of their respondents here — both current and potential.
- **Linkage Technology.**— Linkage technologies have matured to an enormous degree — stimulated by the 1990 census undercount adjustment problem, computing advances, and the statistical insights of people like Tom Belin, Don Rubin, and Bill Winkler (e.g., Jabine and Scheuren 1986; Belin and Rubin 1991; and Scheuren and Winkler 1993).
- **Statistical “Solutions”.**— To hold fast to two (or more) aspects of trust (in partial conflict?) can require not only an ongoing data collection process (e.g., opinion surveys, experiments), careful legislative drafting, and advances in linkage technology, it will also require even more. It is beyond my scope today to work what may be potential solutions. Don Rubin, in a paper done for the CNSTAT Panel on privacy, offers one approach which appeals to me (Rubin 1993). For now, I’m content with an existence proof for a solution here.

One last observation: what I continue to be uncomfortable with is any downplaying of the “privacy” part of the “trust in government” issue. In my opinion, collectively, we are nowhere near where we need to be yet, in our understanding of what people think and how the system ought to proceed.

## ■ Processes

What processes that build on trust do we want to use to get us there? Maybe to get trust we need to give trust. I’ve listed three broad ideas:

- **Be Customer-Driven.**— The first idea is that we, in some small way, look directly at the customer relationships we have. I can think of any number of cooperative endeavors that will help us under-

stand our customers and respond to them as a system. For example,

- Establish a system-wide 800 number for statistical information;
- Make use of a statistical agency computer bulletin board;
- Develop a joint strategy to advertise collective information services; and
- Enlist joint support for an ongoing market or customer survey program, linked to our various (joint and separate) services, as well as measuring the success of our outreach (advertising) activities.
- **“Dantatsu”.**— That is another Japanese term which refers to benchmarking. This second idea suggests that we look very hard at our international competitors and see how we can learn from them. A recent issue of the *Journal of Official Statistics* (vol. 9, no. 1, 1993), which highlights statistical agencies around the world, provides a good starting point. Also, we need to seriously and systematically examine each other’s operations to “steal” (or adapt) the good ideas that we’ve grown at home. Earlier in this talk, I dealt with variability (in final product quality, say) as a weakness in our system; our variability is also a strength if we aggressively look for the best of the best and either adapt it or better it. When Ford was rebuilding itself, their simple dictum was “beat it or buy it.”
- **Share Accountability.**— Being accountable for cooperative efforts is a key strategy. SES, PMRS — you name it. We need to —
  - Commit to cooperation;
  - Make it personal;
  - Document our commitments;
  - Make them measurable; and
  - Meet them.

All of you are probably familiar with the Deming prize that is given each year in Japan (Bowles and Hammond 1991). I'd like us to set up a recognition system, maybe also in Deming's name, to focus on the need for greater interagency cooperation and trust.

All of these general processes (and more — see Exhibit A) can help us obtain the consensus vision that is an essential underpinning to real change. This vision needs to be at every level, **not just at the top.**

This last observation leads me to my next comment, which further elaborates on the notion that the process is the prescription. For those (many?) here who are deep into the second (?) American "revolution in quality," this list will be obvious (Scheuren 1987). There are lots of pressing new challenges that we could cooperate on (or cooperate on **more**):

- Privacy has already been mentioned as an area where lots more cooperative efforts make sense.
- The Vice President has been advocating "data highways" (e.g., Anderson 1993). (Incidentally, I would have preferred labelling these "information highways.") This could be another opportunity.

Whatever choices are made, big or small, we need to get better and better at keeping commitments.

## ■ A "Modest" Prescription

Enough about process as prescription — what do I prescribe? Let's look at three possible options —

- The Current System.**— I don't advocate — maybe nobody does — keeping the current system; it must be changed.
- Centralization.**— While centralization (or vertical integration) options, like those Norwood discussed, have merit, I'm not ready to buy in yet (Binder 1991).
- A Keiretsu Relationship.**— This is what I call the third option, that builds on the system's strengths and directly addresses the concerns Janet Norwood has about trust.

What exactly is keiretsu? In this context, it refers to groups of organizations with interlocking relationships, based on self-enlightened trust. It's goal is mutual benefit. In the framework of government agencies this could be termed "enhancing each agency's ability to achieve its mission."

What about rules? The structure is based on understanding each organizations competencies and supporting appropriate cooperative efforts. It's really simple though —

- Make the right commitments (ones you can keep) and
- Keep them.

A more detailed list of the elements in a keiretsu relationship is shown in Exhibit B, all taken from a useful book entitled *The American Keiretsu* (Burt and Doyle 1993).

In the followup discussion, I'll describe how I see the two basic keiretsu forms being adapted to the current statistical system. Remember what I said earlier: basically, we are not looking at behaviors we haven't tried before. Each of us can find many examples from our day-to-day work lives that fit the attributes in the Exhibit. On the other hand, I would argue that, upon study, you might agree that the trust and cooperative structure of a keiretsu is more systematic, more visible and different enough (deeper enough) that it could form a possible next point for our statistical system.

## ■ What Next?

So, having given you a general idea of my prescription to guide us in re-inventing ourselves, what do I recommend as next steps?

- More **sharing**, like Janet Norwood started, on what the common vision of our future ought to be — including more discussions like this one;
- Some **doing** on the parts of the future we have consensus on — maybe on some modest attempts at achieving "seamlessness" — so that we become

more of a system. Success will increase trust and a virtuous spiral may arise.

- Lots of listening, scholarship and humility, too; and, obviously,
- Not getting discouraged by what doesn't work.
- Finally, we are not Japanese and, in the end, the way we find will be our own way.

### ■ Afterwords

In my remarks I am afraid that I have been too conceptual. Permit me, therefore, to make some specific suggestions in the current context. Then, I'd like to comment further on some of the discussion remarks.

#### *A Template for Change*

The way I see it, what we need is a template for thinking about our statistical system and how to improve it. Keiretsu provides a systematic reference for doing just that. In Japan, **horizontal keiretsu** were built around the banks, with the various companies tied to each other and to the banks by their financial structure. In point of fact, we already have the beginnings of such a setup here, with the regularly scheduled meetings of statistical agency heads, which Hermann Habermann established at the Office of Management and Budget and which Kathy Wallman has carried on. Clearly, we could build on these relationships, especially with regard to marketing and budget issues.

Similarly, from the standpoint of producing economic statistics, a **vertical keiretsu** could develop around the Bureau of Economic Analysis (BEA), which produces estimates of the Gross National Product. Like Toyota and its companion companies, BEA already has strong interlocking ties with the Internal Revenue Service, the Bureau of the Census and the Bureau of Labor Statistics. Many of the criteria of a keiretsu are already being met; what needs to be done is to look at the list of attributes in Exhibit B and see how to strengthen the relationships, thus, giving a new look to something that already exists and making it work better. Using this same kind of template, other keiretsu might also evolve; e.g.,

- The National Center for Education Statistics and its state agencies and private contractors; or
- The National Center for Health Statistics and state agencies, the Health Care Finance Administration, Medicare, etc. — especially, in view of the current interest in a national health plan.

#### *Conflicting Customer Needs*

In their discussion remarks, both Rich Allen and Lorraine Amico spoke of the value of a decentralized system in meeting customer needs. Amico highlighted four major inadequacies that the states have in dealing with the national agencies:

- Duplication of effort;
- Uselessness of resulting data;
- Technological barriers imposed by Federal requirements; and
- Inconsistent leadership by statistical leaders in some agencies. (Amico 1993).

However, as Eva Jacobs pointed out, our users typically ask for more than we are providing and their needs often conflict. As statistical agencies, we need to learn to deal with what it means to be customer-driven. One of our problems as a system, if we are to follow the Total Quality Management approach, is to learn how to manage those conflicting demands. In so doing, we must bear in mind that —

- It is not clear that customers will help us to change;
- The customer issue doesn't really have a direct bearing on which system we ultimately end up with; and
- In point of fact, it is customer entitlements that create the problem, since the users' narrow interests — not what is best for the common good — define what they need from us.

What is really needed is customer marketing research, so we can determine what people really want and not just

what they are entitled to. BEA, for example, could provide funds to do what is needed here in the area of economic statistics.

We must also be open to possible new products for potential new customers. For example, when 3M developed Post-its, they were sent out to customers to introduce them to the new product (Peters and Waterman 1982). The customers didn't know they wanted such a thing, but once they tried them, they liked them and asked for more. IRS did something similar, when it made some of its tabular data available on floppy disks for our *Bulletin* subscribers. Apparently the demand for the product wasn't there then, but maybe it is now. Our experiment with an electronic bulletin board, on the other hand, has been much more successful.

Then, after surveying the customers, we must listen. This would allow the statistical agencies to revalidate the social contracts we have with the public. We will understand our sense of public trust better, so we can sell our customers on a new vision — a different vision.

### **One Final Point**

In the end, let me leave you with a quote by Robert Reich —

**“Boundaries will become so fluid that corporations will become temporary arrangements among entrepreneurial cadres. Except for high volume, capital intensive work, every big company will be a confederation of small ones. All small organizations will be constantly in the process of linking up into big ones.”** (Burt and Doyle 1993)

If the U.S. statistical agencies can achieve that kind of seamlessness, we will have reinvented ourselves — maybe we will have even become a true statistical system based on trust. At any rate, whatever approach we try, it is important that we begin. I hope that Janet Norwood's talk and mine will be the beginning of a dialogue for change.

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