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## **The Evolution of the Federal Statistical System: Implications for Evidence-based Policymaking**

Testimony Presented to the Commission on Evidence-based Policymaking

Andrew Reamer, Research Professor

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- 1) In the 18<sup>th</sup> and 19<sup>th</sup> century, Congress created the foundations of the federal statistical system to provide the information Congress needed to address specific policy questions.
- 2) Several Founders and senior members of early Congresses and the Administrations understood the value of “political arithmetic” to guide public policy.
  - a. They were familiar with the late 17<sup>th</sup> century invention of political arithmetic in England by William Petty and Charles Davenant to calculate optimal tariffs and taxes.
  - b. Benjamin Franklin was the foremost well-known practitioner of political arithmetic in the American colonies.
  - c. The American colonies, particularly those in the north, were active census-takers and understood the value of those efforts.
  - d. Political decision-makers were excited about the new science of survey-based statistics, the first demonstration in the English-speaking world being Sir John Sinclair’s “Statistical Accounts of Scotland,” published in the late 18<sup>th</sup> century. German principalities had pioneered the use of state-sponsored surveys. Sinclair sought to adopt German “statistical” methods (the “science of dealing with data about the condition of a state or community”) to measure the quantum of happiness that existed in Scotland and identifying ways of improving this.
- 3) During the 18<sup>th</sup> and 19<sup>th</sup> centuries, congressional efforts to build federal statistical capacity had four threads:
  - a. In 1790, at the suggestion of Congressman James Madison, Congress added questions to the decennial census beyond those needed for apportionment so that Congress might

“adapt the public measures to the particular circumstances of the community.” The American Community Survey is the current manifestation of Madison’s initiative.

Throughout the 19<sup>th</sup> century, successive Congresses and Presidents greatly appreciated these statistics and eagerly awaited the next set.

- b. From the 1790s forward, Congress actively sought data to guide its setting of tariffs, the second-most contentious policy subject in the 19<sup>th</sup> century, after slavery.
    - Tariffs were the sole source of federal revenues into the Civil War and provided about half of revenues until the passage of the 16<sup>th</sup> amendment allowing an income tax. (The “Internal Revenue Service” was named thus to distinguish it from the much older, externally-facing approach to revenue collection.)
    - Throughout the 19<sup>th</sup> century, Congress often viewed tariffs as the key element of a neo-mercantilist strategy to promote the competitiveness of U.S. manufacturing.
  - c. In the mid-19<sup>th</sup> century, members of Congress saw the need for a general statistical repository to aid in the design of legislation. The result was the creation of the Statistics Bureau in the Treasury Department in 1866.
  - d. Congress periodically created statistical units on other subjects important to the nation’s growth, including agriculture (1863), education (1867), and labor (1884).
- 4) Congress went through a long learning curve before it figured out how to create a well-functioning statistics system—what information to seek; how to collect and maintain reliable, useful information through administrative records and surveys; how to analyze these data for policy purposes; and how to do all this on a regular basis to provide a sense of change over time.
- a. The 1850 Census, which included the fourth census of manufactures, was the first successful implementation of a large federal survey using sound statistical and administrative principles.
  - b. By 1880, the government could effectively design and implement large-scale statistical operations, as evidenced by the decennial census and census of manufactures.

- c. By the early 20<sup>th</sup> century, Congress had set up a broad, workable framework of statistical agencies that largely remains in place to this day.
- 5) The idiosyncratic design of today's federal statistical system is a function of this history.
- a. The Census Bureau's lead role in the collection of household information can be traced back to James Madison's idea in 1790.
  - b. The three primary federal economic statistics units emerged from successive congressional attempts, and multiple failures, to produce data to set tariffs.
    - The origin of the Census Bureau's Economics Directorate lays in Congress's amendment to the Census Act of 1810, at the suggestion of Treasury Secretary Gallatin, to include the first census of manufactures.
    - The beginning of the Bureau of Economic Analysis can be traced to Congress's 1820 directive to the Treasury Department to provide the first comprehensive set of annual trade statistics. Today, BEA's sole primary data collection effort is in the realm of international transactions.
    - At the suggestion of the first Commissioner of Labor, Carroll Wright, in 1888, Congress directed the Labor Department (what is now the Bureau of Labor Statistics) to collect the data that would allow Congress to "scientifically" set tariffs that equalize U.S. and foreign costs of production. In 1890 and 1891, Wright undertook analyses of multiple industries through collecting massive amounts of data on the key variables in the scientific tariff formula, including the costs of production, producer prices, labor time and earnings, and the cost of living. While neither Wright nor Congress had the capacity to produce and use scientific tariffs, Wright's efforts have lived on at BLS. To this day, its organizational structure and programs include producer and consumer prices, employment and earnings, and productivity.
  - c. When Congress set up the Department of Commerce and Labor in 1903, it recognized the desirability of consolidating federal statistical functions in that department and so gave the President the authority to move units from other departments to Commerce

and Labor. While that authority still exists (15 USC 1517), the list of departments remains limited to those in place in 1903.

- d. In the 20<sup>th</sup> century, Congress shifted its focus on statistics to mechanical uses for the purposes of setting and implementing policies, including:
    - Scientific tariff-setting – as reflected in the creation of the Tariff Commission in 1916 (which took over the analytic function originally given BLS in 1888)
    - Macroeconomic policies – as authorized by the Employment Act of 1946
    - Distribution of federal financial assistance – as embodied in various New Deal and Great Society programs and their successors
  - e. In the 20<sup>th</sup> century, Congress continued its pattern of creating statistical units to inform policy and research on individual subjects – including the IRS Statistics of Income Division (1917), the National Science Foundation’s statistical functions (1950), health (1960), energy (1977), justice (1979), and transportation (1992).
  - f. Throughout this history, a common theme is Congress’s creation of statistical units and programs to address specific, practical issues, rather than the more general creation of a broad, integrated statistical system that serves all comers on all topics.
  - g. Also throughout this history, the development of the federal statistical system facilitated advances in the social sciences in the U.S. In return, those advances, particularly in the statistical sciences, were instrumental in the remarkable growth in the capacity of the federal statistical system from 1850 forward.
- 6) History suggests that Congress usually has not had the capacity and will to systematically use statistics to design appropriate, effective public policies.
- a. In the first half of the 19<sup>th</sup> century, Congress believed that access to data would suffice.
  - b. Once Congress obtained data, it realized it lacked the capacity to know how to use it, so after the Civil War it created executive branch units that would analyze the data and provide expert opinion.

- c. However, Congress often ignored or disparaged the expert opinions it received because they conflicted with members' political interests and priorities, particularly regarding high tariffs.
  - d. Congress found statistically-based mechanical approaches to policy attractive because they got Congress off the political hook. Members found the tariff-setting process highly stressful, and increasing so as the economy—and the number of goods available—grew in size and complexity. But even after setting up the Tariff Commission in 1916, Congress found reason to ignore its findings.
  - e. The high point of congressional capacity and will to proactively use federal statistics in policy design and analysis was from the mid-1960s to the mid-1990s, at which point the then-new Republican majority significantly cut staff capacity and budget and they've never been fully restored.
- 7) While the traditional purpose of the federal statistical system has been to serve federal policy and program needs, over time key users of that system have expanded to include, by the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, social scientists and large corporations, and as of the advent of the Internet in the late 1990s, individual residents and small- and medium-sized businesses. As a consequence, now more than ever, the quality of the statistical system can be a major determinant of the health of the U.S. economy and society.
- 8) Congress was acutely interested and invested in the development of the statistical system as long as it had political "skin in the game."
- a. Congress cared about the statistical system as long as it retained its constitutional authority to set tariffs and was accountable to constituents and business interests for its decisions. Congress delegated that authority to the President in 1934, at which point it showed much less interest in industry and trade statistics.
  - b. Congress was invested in a strong system of statistical indicators when it believed in Keynesian economic policies to promote growth and the nationwide redistribution of taxpayer funds to aid less advantaged populations.

- c. Once the statistics-driven mechanical financial aid distribution model lost favor under President Reagan, Congress showed less interest in the statistical system.
- d. For instance, four presidents made 13 requests to Congress over 19 years (1990-2009) for \$8 million so that the Census Bureau could collect services industry data more frequently than once every five years, and which in turn would allow BEA to produce more reliable estimates of quarterly Gross Domestic Product. Congress's long-standing refusal to provide this small amount of money is a key reason that BEA initially underestimated the depth of the Great Recession by a large margin.

#### 9) Conclusions and Implications

- a. Despite the issues mentioned, the U.S. has one of the best national statistical systems—one that can be used to determine federal policy and program implementation, enable sophisticated social science research, and guide the decisions of individual residents and businesses.
- b. However, with proper investment that system could be stronger. Its strength is very much a function of ongoing congressional interest.
- c. The nature of that interest is determined by some combination of members' political and good government concerns, with the former being an essential element and the latter an optional one.
- d. Consequently, I encourage the Commission to consider how a federal data clearinghouse might be designed to serve the needs of congressional budget, appropriating, and authorizing committees and, very importantly, be deemed essential to their effective operation.
- e. If the Commission wishes to consider ideas for improving the integration and structure of the statistical system, I suggest it consider a recommendation to amend 15 USC 1517—repurposing that law to current needs and saving Congress the trouble of determining a new design. Congress could add an accountability clause to give it the opportunity to review and approve an Executive Branch plan within a certain number of days.