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# The Structure of the U.S. Economic Statistical System: Implications for Public Policy

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## Abstract

Current, accurate, detailed federal economic statistics are essential to the proper functioning and growth of the U.S. economy. Federal, state, and local government policy-makers and millions of businesses rely on economic statistics to assess conditions, guide investments, and evaluate results.

However, institutional inertia in the realm of federal economic policy-making has resulted in an undersupply of the data required by public and private decision-makers across the nation.

In the aftermath of the Depression and World War II, the federal economic statistical system was created to provide a dependable flow of data to central macroeconomic policymakers to manage the business cycle. In the mid-20th century, these policymakers paid relatively little attention to issues concerning the building blocks of national economic performance, e.g., innovation, regional development, human capital, entrepreneurship, access to financial capital, and physical infrastructure. As a result, statistical agencies considered the production of data describing these building blocks as secondary to their primary mission of providing macroeconomic data to central policymakers.

The cyclical management-centric approach to economic policy was adequate while the nation's industrial structure was relatively stable, which it largely was through the 1970s. However, since the early 1980s, U.S. economic structure has been substantially and regularly disrupted as the result of innovations in communications, transportation, product development, production technology, and finance.

While the nation has faced a new economic reality for 30 years, its approach to national economic policy, and to the economic statistics that serve that policy, has remained in a mid-20th century framework. In particular, data are insufficient to guide effective public and private decisions regarding the economic building blocks.

The nation requires an approach that integrates "top down" macroeconomic cyclical policy with "bottom up" policies that enhance the building blocks of the U.S. economy by enabling public and private actors across the nation to make more informed decisions. Such an approach would require statistical agencies to produce data that serve a wide array of users and to become more entrepreneurial and innovative in the process.

## Introduction

The core of the United States economic statistical system is comprised of three organizations: the Census Bureau's Economics Directorate, which collects data on business characteristics and activity; the Bureau of Labor Statistics (BLS), which gathers data on labor market and work conditions; and the Bureau of Economic Analysis (BEA), which manages the national economic accounts.

The current structure and orientation of the U.S. economic statistical system developed in the mid-20th century to support a highly innovative effort to prevent and ameliorate economic difficulties of the sort experienced in the 1930s and 1940s—depression and inflation in particular.

National economic officials believed that they could tame economic volatility through the intelligent application of newly developed principles of fiscal (Keynesian) and monetary policy—adjusting expenditures, revenues, interest rates, and monetary supply as needed to ensure that the economy remained stable. A well-functioning U.S. economic statistical system was viewed as essential to efforts to effectively "fine tune" the economy. Only with accurate, detailed data on current macroeconomic activity could economists ascertain the appropriate fiscal and monetary policy responses.

For the past 60 years, the three core statistical organizations have consistently viewed their primary mission as serving the nation's macroeconomic policymakers—including the Federal Reserve Board of Governors, the Treasury Department, the Office of Management and Budget, the Council of Economic Advisers, and, in the last two decades, the National Economic Council.

However, the circumstances under which these statistical organizations operate have changed significantly, in three ways:

- Economic: a dramatic change in the industrial structure, competitive vulnerability, and geographic location of the nation's economic base
- Technological: an orders-of-magnitude advance in the capacity of public and private data users across the nation to access, absorb, and analyze federal economic statistics
- Political: a decline in Congress and Administration understanding of the value of federal economic statistics for effective public policy

To date, the dramatic changes in economic and technological circumstances have not led to a fundamental re-orientation of the federal government's traditional macroeconomic approach to policy. Consequently, the statistical organizations continue to treat macroeconomists as their primary clients.

However, there are reasons to think that the changed circumstances call for a significant redefinition of the nature of federal economic policy, one that expands beyond a macroeconomic framework to include efforts to enhance the nation's economic competitiveness, e.g., through encouraging innovation, regional development, and improved physical infrastructure. Such a change would have substantial implications for the priorities of the statistical organizations, in particular placing the needs of non-federal data users on a par with federal ones.

Though the orientation of the statistical agencies has remained constant, the change in political circumstances has inhibited their ability to adequately perform their traditional functions, much less carry out significant new ones. In particular, agencies have had difficulty obtaining the funding needed to fully capture changes in the nation's economic structure. While statistical agency budget conditions have momentarily improved, a re-defined federal economic policy that included improved competitiveness, particularly at the regional level, would give members of Congress an additional, self-interested rationale for supporting healthy statistical budgets.

**Primary Federal Economic Statistical Organizations—Activities and Origins**

The ***Census Bureau***, in the Commerce Department, conducts the decennial population census and publishes current population, housing, and economic statistics. Its Economics Directorate produces current statistics (on manufacturing, construction, trade, services, foreign trade, and government) and every five years carries out an economic census of 26 million business establishments and a census of the nation's 90,000 state and local governments. For Fiscal Year (FY) 2010, the proposed Economics Directorate budget is $300 million, including salaries for 2,100 full-time equivalent (FTE) personnel.

The historical origins of the Census Bureau's economic statistics operations are rooted in the desire of the nation's leaders to have an accurate picture of the characteristics of the key elements of the economy. From 1810 through 1940, the decennial census of population included an ever-broadening census of economic activity. By the 1920s, the Census Bureau also had developed outside of decennial census operations a number of direct reporting systems by industry.

The ***Bureau of Labor Statistics***, in the Department of Labor, produces statistics on labor force, prices and cost of living, compensation and working conditions, and productivity and technology. For FY 2010, the proposed BLS budget is $612 million, including the salaries of about 2,400 FTEs.

The Bureau of Labor Statistics was established in 1884 as a result of substantial advocacy by the labor movement, which sought a federal organization to educate Congress and the public regarding workers' conditions. For its first 40 years, BLS largely focused on writing reports, though by the 1920s it did produce statistics related to wages, cost of living, and working conditions (but not unemployment).

The ***Bureau of Economic Analysis***, in the Commerce Department, manages four types of economic accounts—national income and product (e.g., gross domestic product), international (e.g., trade balance), industry (e.g., input-output accounts), and regional (e.g., state and local personal income). It largely relies on secondary data, mainly from the Census Bureau and BLS. For FY 2010, BEA has requested $101 million, including salaries for 545 FTEs.

BEA traces its origins to a Bureau of Foreign and Domestic Commerce (BFDC) created in 1913. For its first two decades, BFDC primarily compiled economic statistics from public and private sources into reports; it also analyzed the business situation.

## Creation of the Modern Economic Statistical System

As of the mid-1920s, federal economic statistics were an amalgam of disparate data collections and reports carried out by multiple agencies. Under the period's laissez faire attitudes, economic statistics were seen primarily as a tool for businesses to make informed decisions, which would in turn benefit the greater economy. Data reports tended to be industry-specific. As federal economic policy was circumscribed in scope and sophistication, its use of economic statistics was likewise.

The ensuing Great Depression provided the impetus to build the foundation of the modern economic statistical system. The Roosevelt Administration took a more proactive approach to economic policy than its predecessor and recognized the importance of reliable statistics in guiding government efforts.

The change catalyst was the Committee on Government Statistics and Information Services (COGSIS), sponsored by the American Statistical Association and the Social Science Research Council. COGSIS efforts led to a significant expansion of federal economy-wide statistics, greater coordination among agencies, professionalization of agency staff, and widespread efforts to develop and apply statistical techniques, particularly probability sampling.

Also important was BFDC's development and implementation of national income accounting, stimulated by the work of Simon Kuznets. BFDC then successfully implemented the concept of gross domestic product to measure and guide utilization of economic resources during World War II.

The modern federal economic statistical system came into being after World War II. Its development was motivated by a desire to avoid new economic traumas and by an increasingly widely shared belief that the federal government could use emerging principles of economic science to guide the nation's economy away from turbulence and towards prosperity. This belief was the basis for the Employment Act of 1946, which declared the federal government's responsibility "to use all practical means . . . to coordinate and utilize all its plans, functions, and resources for the purpose of creating and maintaining . . . conditions under which there will be afforded useful employment . . . and to promote maximum employment, production, and purchasing power."

As reflected in the Act, federal policymakers viewed the economy as a social engineering problem to be solved as the nation had successfully addressed large-scale physical engineering challenges earlier in the century. It was believed that federal economic policymakers, relying on newly emerging principles of macroeconomic science and good data, could pull the right fiscal and monetary levers to see that the economic cycle remained on course.

The Act's passage catalyzed the structuring of a coherent, integrated, though still decentralized, economic statistical system with specific roles for BEA, BLS, and Census Bureau economics programs. The primary mission of each of these organizations was to provide a regular, dependable flow of data to enable effective federal management of the economic cycle.

## Federal Economic Policy and Statistics in a World of U.S. Dominance: 1946-1980

Macroeconomic policymakers did not see the need to manage the economic base and its underpinnings (e.g., innovation, regional and labor force development, entrepreneurship, access to

capital, and physical infrastructure). It was thought that with proper fiscal and monetary policies, this base—oligopolistic, manufacturing-centered, dominated by cities in the Northeast and Midwest, focused on domestic markets and with little foreign competition—would take care of itself. Consequently, efforts to enhance economic structure were addressed ad hoc outside of macroeconomic policy, e.g., the creation of the National Science Foundation (1950), the Small Business Administration (1953), and the interstate highway system (1956).

In the 1960s, as the nation became more prosperous, federal attention turned to reducing economic and social inequities. The Great Society made targeted investments in infrastructure, labor, and housing for distressed areas and populations. These efforts were not seen by macroeconomic policymakers as particularly relevant to their concerns.

The rationale for the methods of Great Society programs was the same as for the Employment Act of 1946—society presented social engineering problems and good, data-driven, "positivist" social science could ascertain how best to mechanically intervene "top down."

Concomitant with the expansion of the federal assistance programs role was an expansion of federal statistical capacity. Grant eligibility criteria and allocation formulas often were based on small area statistics (e.g., per capita income). Local grantees needed good data to guide action. Thus, statistical agencies added as a priority the production of subnational data needed to support the operations of federal grant programs.

**The Economic Base in Play and the Policy Response: 1980-2009**

The cyclical management-centric approach to economic policy was sufficient as long as the U.S. economic base was structurally stable, which it essentially was through the 1970s (though the gasoline crises suggested vulnerabilities to come). However, innovations in communications, transportation, product development, production technology, and finance led to the disruption of this base. From the early 1980s forward, these innovations enabled the dispersion of plants and personnel across the country and around the globe; greater fluidity in business structures (mergers, acquisitions, entrepreneurship); and intense global competitiveness.

As result, a number of industries have seen their competitive advantage narrowed or eliminated; many communities have lost stability, wealth, and an economic reason for being. No industry or region can take its economic competitiveness for granted. This situation has been exacerbated by the current economic crisis.

Unlike the response to the macroeconomic cycle traumas of the 1930s and 1940s, though, the U.S. has yet to create a coherent policy approach for addressing its competitive vulnerabilities. While the nation has faced a new economic reality for 30 years, its approach to economic policy remains in a mid-20$^{th}$ century macroeconomic framework.

Instead, the federal government periodically implements ad hoc, silo-oriented approaches to address structural concerns, e.g., the Technology Administration in the 1980s, the Intermodal Surface Transportation Efficiency Act of 1991, and the Workforce Investment Act of 1998. Typically, these approaches have fallen short of promises and expectations.

Since the 1980s, the burden of addressing economic disruption and promoting competitiveness in a coherent manner has fallen to numerous state and regional economic development organizations. However, their effectiveness has been greatly hampered by a lack of resources, scale, data, and knowledge about effective approaches.

In the absence of a fundamental change in approach to national economic policy, the statistical agencies continue to view the federal government as their primary customer, with a particular emphasis on macroeconomic policy. BEA, for example, defines its core programs as those producing: (1) statistics that feed into the estimation of gross domestic product and related statistics, (2) statistics required by law, or (3) statistics required for the administration of federal programs.

**The Current State of Federal Economic Statistical Agencies**

At present, the nation suffers from an undersupply of current, accurate, useful data, for macroeconomic policy and otherwise. One reason is constrained budgets. Fewer congressional members and OMB decision-makers have appreciated the value of a $1 billion investment in economic statistics to facilitate the growth and stability of a $14 trillion economy. Statistical agencies have not been exempted from the budget constraints faced by discretionary domestic programs.

Through 2008, inadequate funding for federal economic statistical agencies has had several debilitating impacts. A number of existing economic data series (e.g., consumer price index, regional earnings data) were eliminated, reduced in detail and accuracy, or not recalibrated to account for new benchmark data and new methods. As a result, decision-makers' ability to accurately track economic activity, productivity, prices, housing characteristics, earnings, and employment was materially eroded.

Further, the economic statistical system was not adequately upgraded to reflect the major recent structural changes in the economy, including the enormous growth of services industries; large-scale technological innovation; greater geographic mobility; increased trade and global competition; the rise of entrepreneurship; ongoing corporate restructuring (mergers, acquisitions, spin-offs, outsourcing, failures); greater complexities in financial markets; and the extensive transformation of regional economies. As a result, policymakers have been unable to see the trends and dynamics that explain the nation's current economic condition and provide a picture of risk and opportunity.

Moreover, the statistical system was not able to take full advantage of remarkable advances in information technology and statistical methods. These advances offer agencies once undreamed-of opportunities to produce data that reveal the workings of the economy in breadth, depth, and detail, e.g., tracking business openings and closings, worker hires and fires, and worker flows from job to job by industry and location.

With the FY2009 and proposed FY2010 appropriations, Congress and the Obama Administration have taken first steps to rectify many of these problems. In contrast to its predecessors, the Administration has emphasized the importance of "evidence-based policy" and so has been more supportive of statistical budgets. At the same time, passage of proposed budgets is uncertain and it is

unclear the extent to which future proposed budgets will adequately address significant remaining issues and opportunities.

Needed data also are undersupplied because statistical agencies have not paid sufficient attention to the needs of users other than federal macroeconomists and formula grant programs. Interestingly, this dynamic feeds the weak political backing for agency budgets. Adequate budgets would be more likely if the statistical system were less opaque to non-federal data users, who would be in a more informed position to provide support.

**A New Approach to Federal Economic Policy and Statistics**

The United States very much needs an approach to economic policy that integrates traditional cyclical management with efforts to enhance the competitiveness of the economic base. This approach should encompass all dimensions of economic structure, including industry competitiveness, regional economic and workforce development, innovation, entrepreneurship, physical and financial infrastructure, and community stability. Structural policies should reflect the fact that the health of the national economy is a function of the economic competitiveness of its regions.

While macroeconomic policy is "top-down" of necessity, effective structural policy is "bottom-up," enhancing the capacities of businesses, governments, and workers. While fiscal incentives, such as grants and tax credits, can be useful in this regard, the lowest-cost, most cost-effective structural policy tool is current, accurate, detailed economic data that can inform intelligent decision-making about in what types of goods, services, and activities to invest scarce resources, how much, and where. Such data would describe, for example, regional and industry economic performance and structure, commodity flows, and business, workforce, and innovation dynamics, for use by businesses and entrepreneurs, nonprofit public purpose organizations, state and local governments, and federal program agencies.

Metaphorically, the needed paradigmatic shift is from Newtonian, mechanistic physics—seeing the universe as an engineering problem to master—to quantum physics—a universe of uncertainty that is amenable to efforts to raise the probabilities of desirable events (e.g., successful technology and business development). The federal government has an important role in overcoming the market failure of insufficient and inaccurate information. As information is an inexpensive public good, the return on the nation's investment in economic statistics is nearly infinite. Consequently, the data needs of federal and non-federal data users should be served equally.

While an older statistical system role, though now secondary, has been to publish reports to aid non-federal decision-making, rudimentary forms of data dissemination and analysis limited the size of the audience and its capacity to absorb data. Since the 1990s, new information technologies have enabled an extraordinary increase in the number of data users and their capacity to work with, and benefit from, large volumes of data. While statistical agencies have become more effective in electronic data dissemination, they should more explicitly determine how they can best provide data access and value-added web tools to facilitate public and private decision-making.

A structurally dynamic, open, knowledge-based economy requires a statistical system that adequately reflects these qualities through innovative data series that take full advantage of IT advances and statistical agency staff creativity. The IT transformation allows statistical agencies to shift from a command-and-control, production shop style of management to one of stimulating entrepreneurship within, more readily allowing innovative efforts to emerge. Greater interaction with non-federal users can lead agency cultures to become more customer-oriented and flexible. And in times of tight budgets, agencies will value a customer base willing to speak out on their behalf.

A redefinition of federal economic policy to include an integrated, coherent approach to competitiveness is sorely needed. Such a redefinition should lead to an explicit re-purposing of the economic statistical agencies so that they will obtain the direction, budgets, and user relationships necessary to provide the data needed for improved public and private decision-making and a stronger economy.

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