

The Economic Census and Its Role in Economic Statistics

Andrew Reamer

George Washington Institute of Public Policy
George Washington University

2012 Economic Census Conference

U.S. Census Bureau

October 15, 2012

The Importance of the 2012 Economic Census

Over the coming decade, a complete, reliable 2012 Economic Census will be essential for a strong, internationally competitive U.S. economy and fiscally sound public sector.

The Economic Census and Its Role in Economic Statistics

- **Then – 1810 Census of Manufactures**
- Now – 2012 Economic Census

Origins of the Economic Census – the Napoleonic Wars

Non-Intercourse Act - March 1, 1809 An ACT to interdict the commercial intercourse between the United States and Great Britain and France, and their dependencies; and for other purposes.

Be it enacted . . . , That from and after the passing of this act, the entrance of the harbors and waters of the United States and of the territories thereof, be, and the same is hereby interdicted to all public ships and vessels belonging to Great Britain or France, excepting vessels only which may be forced in by distress, or which are charged with despatches or business from the government to which they belong, and also packets having no cargo nor merchandise on board. And if any public ship or vessel as aforesaid, not being included in the exception above mentioned, shall enter any harbor or waters within the jurisdiction of the United States. or of the territories thereof, it shall be lawful for the President of the United States, or such other person as he shall have empowered for that purpose, to employ such part of the land and naval forces, or of the militia of the United States, or the territories thereof, as he shall deem necessary, to compel such ship or vessel to depart.

Origins of the Economic Census

Resolution, House of Representatives,
June 7, 1809

Resolved, That the Secretary of the Treasury be directed to prepare and report to this House, at their next session, a plan for the application of such means as are within the power of Congress, for the purpose of protecting and fostering the manufactures of the United States; together with a statement of the several manufacturing establishments which have been commenced, the progress which has been made in them, and the success with which they have been attended; and such other information as in the opinion of the Secretary shall be material in exhibiting a general view of the manufactures of the United States.

Origins of the Economic Census

MANUFACTURES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES, APRIL 19, 1810.

TREASURY DEPARTMENT, *April 17, 1810.*

SIR:

In obedience to the resolution of the House, I have the honor to transmit a report, in part, on the subject of American manufactures.

Some important information has been obtained, but is, in general, partial and defective; and it would have been desirable that the report might have been delayed till the next session.

Permit me to observe, that the approaching census might afford an opportunity to obtain detailed and correct information on that subject, provided that the deputy marshals were directed by Congress to collect it, and to make returns in such form as would be prescribed.

I have the honor to be, very respectfully, sir, your obedient servant,

ALBERT GALLATIN.

Origins of the Economic Census

CHAP. XXXVIII.—*An Act further to alter and amend "An act providing for the third census or enumeration of the inhabitants of the United States."*

STATUTE II.

May 1, 1810.

SEC. 2. *And be it further enacted, That it shall be the duty of the several marshals, secretaries, and their assistants aforesaid, at the time for taking the census or enumeration aforesaid, to take, under the direction of the Secretary of the Treasury, and according to such instructions as he shall give, an account of the several manufacturing establishments and manufactures within their several districts, territories and divisions.* The said assistants shall make return of the same to the marshals or secretaries of their respective districts or territories, and the said marshals and secretaries shall transmit the said returns, and abstracts thereof, to the Secretary of the Treasury, at the same times at which they are by this act, and the several acts to which this act is an addition, required respectively to make their return of said enumeration to the Secretary of State; for the performance of which additional services they shall respectively receive such compensation as shall hereafter be provided by law.

Manufacturing establishments to be reported to the marshals and by them to the Secretary of the Treasury.

APPROVED, May 1, 1810.

Origins of the Economic Census

March 19, 1812.

Information obtained under the act of May 1, 1810, ch. 38, to be digested.

II. RESOLUTION *on the subject of Arts and Manufactures.*

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be directed to employ a person to digest and reduce to such form, as shall be deemed most conducive to the interests of the United States, a statement of the number, nature, extent, situation and value of the arts and manufactures of the United States, together with such other details, connected with these subjects, as can be made from the abstracts and other documents and returns, reported to him by the marshals and other persons employed to collect information in conformity to the second section of the act of the first of May, one thousand eight hundred and ten, and such other information as has been or may be obtained, which the subject will admit of; and that he report the same to Congress.

APPROVED, March 19, 1812.

Origins of the Economic Census

Tench Coxe, A Statement of the Arts and Manufactures of the United States of America for the Year 1810,
December 8, 1812

It is a manifest truth to which we ought most seriously to advert, that, besides the proper or corporal powers, industry and skill of the people of the United States, we have attained, by water, steam, cattle, labor-saving machinery and chemistry, the means to effect, with an exactness and promptitude beyond the reach of manual power and skill, *a great variety and number of manufacturing operations. These wonderful machines, working as if they were animated beings, endowed with all the talents of their inventors, laboring with organs that never tire, and subject to no expence of food, or bed, or raiment, or dwelling, may be justly considered, as equivalent to an immense body of manufacturing recruits, suddenly enlisted in the service of the country.**

Origins of the Economic Census

Tench Coxe, A Statement of the Arts and Manufactures of the United States of America for the Year 1810,
December 8, 1812

In order to display the present form and nature, and in some degree the extent of the arts and manufactures of the United States, the substance of the returns of the marshals and their assistants, are presented, in the shape of two series of official tables in the third and fourth parts of this work. In submitting this body of new evidence, it is necessary to state, that the information it contains is of various dates, in the last five months of 1810; and, that it relates to the whole national population of that time, being 7,239,903 persons of both sexes, and of all colours, ages and conditions. Though many of the officers and assistants have performed this new and difficult service with much zeal and intelligence, yet various causes have concurred, to occasion, numerous and very considerable imperfections and omissions, in returns from cities, towns, villages, townships, hundreds, counties, and, as to valuable articles and branches, from states, to be observable. In these first sets of tables, it has not been thought best to supply those defects by detailed and diversified estimates, which must be erroneous and might be sanguine. It was observed, that there were some instances of goods of a doubtful nature, or which could not be considered as manufactured in so material a degree, as strictly to entitle them to be placed in the class of “*manufactures*.” These have been separately exhibited, but are considered as sufficiently relative to the subject, to render these imperfect returns of them useful, both to the various departments of the government, and to those persons, who are engaged in, or propose to enter into the manufacturing business.

Origins of the Economic Census

- 1810 – no direction from Congress, State, or Treasury
- 1820 – detailed questionnaire and instructions, but returns were incomplete, inaccurate, and poorly tabulated
- 1840 – design and implementation problems
- 1850 – introduction of firm confidentiality, explanation of the questions, and tabulation process improvements, resulting in first reliable census of manufactures

The Economic Census and Its Role in Economic Statistics

- Then – 1810 Census of Manufactures
- **Now – 2012 Economic Census**
 - **Foundational Uses**
 - Direct Uses
 - Microdata Research

Foundational Uses

The Bureau of Economic Analysis relies on the Economic Census to construct benchmark input-output (I/O) accounts.

Benchmark I/O accounts in turn are used to:

- benchmark GDP, which serves as the basis for quarterly and annual estimates
- forecast GDP and federal revenues and expenditures
- construct state and local I/O models and social accounting matrices to estimate impacts of proposed policies

Foundational Uses

The Economic Census enables the reliability of federal and private sample surveys:

- Sampling frame – Economic Census → Business Register → sampling frame for Census business surveys
- Benchmarks – Federal statistical agencies and industry associations adjust survey-based estimates to align with the Economic Census
- Weights – The Fed and BLS adjust indices of industrial production, productivity, and prices to the industry and product mix in the Economic Census

Foundational Uses

Twelve monthly and quarterly Principal Federal Economic Indicators use the Economic Census for sampling frame, benchmarking, and/or weighting:

- Bureau of Economic Analysis – GDP (nominal and inflation-adjusted)
- Bureau of Labor Statistics – labor productivity, Producer Price Index
- Federal Reserve – industrial production
- Census Bureau – manufacturing (factory orders, business inventories, durable goods), wholesale trade, retail trade, services, Quarterly Financial Reports

Foundational Uses

Additional federal statistical estimates that use the Economic Census for sampling frame, benchmarking, and/or weighting include:

- HUD – monthly estimates of new manufactured housing
- BEA – annual GDP (nominal and inflation-adjusted)
- Census – annual activity in manufacturing, retail trade, wholesale trade, services, capital expenditures, and information technology
- NSF – annual R&D expenditures
- HHS – annual estimates of employer-sponsored health insurance coverage
- DOE – manufacturing energy consumption (every four years)
- DOT – commodity flows (every five years)

Uses of the 2012 Economic Census

- 1) Foundational Uses
- 2) **Direct Uses**
- 3) Microdata Research

Direct Uses

- Individual businesses use the Economic Census to compare their operations to industry norms, find markets, and make decisions about operating sites, capital investment, marketing, and product development.
- Industry associations rely on data from the Economic Census to gauge sector organizational structure and product trends and guide their government relations strategy.
- Women- and minority-owned business associations use the Economic Census to assess and educate others about ownership patterns and how they change over time.
- State and local economic analysts use Economic Census data in conducting in-depth assessments of industry structure, competitiveness, demand for skilled labor, and entrepreneurship.
- State and local governments set small business procurement guidelines on the basis of the Economic Census.

Direct Uses

Federal program agencies use Economic Census data to identify trends and generate policy recommendations.

- ITA assesses the competitiveness and trade patterns of individual industries.
- Census constructs the Business Dynamics Statistics data tables.
- NSF analyzes business R&D data.
- SBA and MBDA analyze the results of the Survey of Business Owners to track trends in entrepreneurship development.

Uses of the 2012 Economic Census

- 1) Foundational Uses
- 2) Direct Uses
- 3) **Microdata Research**

Microdata Research

- Through the Census Bureau's Center for Economic Studies, federal and academic research economists analyze Economic Census microdata to understand trends in industry and business development and the implications for public policy.
- These economists primarily work with the Longitudinal Business Database, which contains data from each Economic Census, the Annual Survey of Manufactures, and other business surveys.

Conclusion

The 2012 Economic Census will provide the underpinning necessary if the United States is to regain its economic stability and return to a path of growth, international competitiveness, and job creation.

The Economic Census and Its Role in Economic Statistics

Andrew Reamer, Research Professor
George Washington Institute of Public Policy
George Washington University

areamer@gwu.edu

(202) 994-7866