

Re-engineering the Census Bureau's Annual Economic Surveys

Reactions and implications for
the Federal Reserve

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Appreciation

- Careful strategy and planning
- Outreach to stakeholders
- Maintain solid statistical foundation

Commitment to Data Quality: Company visits and interviews

- NAICS classifications don't always work
 - Reflected in private industry reports
 - American Iron and Steel Institute tracks production by market (automotive, mining, construction), not product type

Commitment to Data Quality: Company visits and interviews

- Establishments aren't always a natural unit of reporting
 - Company may be structured by geographic region or business line, and may not track data by individual locations

Commitment to Data Quality: Company visits and interviews

- Can be hard for companies to answer the questions
 - Almost always takes more than one person
 - Company info may not easily map to survey form
 - Respondents can be uncomfortable making decisions about how to answer

Data Quality

- Meeting respondents where they are...
 - Maximizes likelihood that respondents answer questions as intended
 - Minimizes respondent burden
 - Accelerate publication time?
- Better data → Better policies

Annual Data: FRB uses

- **Direct:** Census data are inputs to the annual benchmarks for FRB's indexes of industrial production
- **Indirect:** FRB uses other high frequency data that are benchmarked to annual surveys
- **Research:** Research using annual data is important in understanding long term trends in economic activity

Annual Census data: Direct use

E statistical release



FEDERAL RESERVE

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INDUCTION AND CAPACITY UTILIZATION

INDUSTRIAL PRODUCTION

Industrial production rose 1.6 percent in October after falling 1.3 percent in September; about half of the gain reflected a recovery from the effects of Hurricane Ida. Manufacturing output increased 1.6 percent in October; excluding a large gain in the production of motor vehicles and parts, factory output rose 1.2 percent in October.

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(over)

Industrial Production and Capacity Utilization: Summary

Industrial Production
Seasonally adjusted

Item	2017=100						Percent change						Oct. '20 to Oct. '21
	2021 May'	June'	July'	Aug.'	Sept.'	Oct. ^P	2021 May'	June'	July'	Aug.'	Sept.'	Oct. ^P	
Total index	99.9	100.4	101.3	101.3	100.0	101.6	.7	.5	.8	.0	-1.3	1.6	5.1
Final Products	99.9	100.4	101.4	101.3	100.0		.7	.5	1.0	-.1	-1.3		
Consumer goods	99.8	99.8	101.6	101.4	100.3	101.6	.7	.0	1.8	-.1	-1.1	1.3	5.0
Business equipment	100.1	99.7	100.8	100.8	99.3	100.7	.6	-.3	1.0	.0	-1.5	1.4	2.6
Nonindustrial supplies	93.8	93.3	96.3	95.7	95.4	95.5	1.6	-.5	3.3	-.7	-.3	.2	5.9
Construction	96.6	96.3	97.2	97.7	97.8	98.4	.0	-.4	.9	.5	.2	.6	3.7
Materials	99.2	98.1	99.4	99.7	101.3	101.4	-.9	-1.2	1.4	.3	1.6	.1	3.3
	101.1	102.3	102.3	102.2	100.3	102.6	.9	1.2	-.1	.0	-1.9	2.3	5.8

Industrial production

Total index

Previous estimates

Major market groups

Final Products

Consumer goods

Business equipment

Nonindustrial supplies

Construction

Materials

Annual Census data: Direct use

Industrial Production

- Monthly index of real output in the industrial sector (Manufacturing, Mining, and Utilities)
 - Data from a variety of sources
 - 296 individual indexes
 - Timely
 - 6-month window
 - 100 years

Annual Census data: Direct use Industrial Production

- Monthly production indexes anchored to annual benchmarks
 - Nominal gross output deflated by a price index
- SIC vs NAICS Manufacturing
 - Publishing & Logging

Annual Census data: Indirect uses

- Higher frequency data that we follow closely can revise when benchmarked to newly-released Annual data
 - BEA's measure of Personal Consumption Expenditures (PCE) revises when the Monthly Retail Trade Survey gets benchmarked to the Annual Retail Trade Survey or Services Annual Survey

Annual Census data: Research

- Federal Reserve economists conduct academic-style research
 - Public use data
 - Microdata access at a Federal Statistical Research Data Center
- Consistent variable names/concepts will facilitate comparisons across sectors
 - Historical consistency is also important

Importance of Comprehensive Data

- Targeted, high-frequency data are important, but they can't replace broad-based surveys with a long history
- Annual Integrated Economic Survey will provide reliable, consistent measures that continue to meet stakeholder needs

Thank you!