Re-engineering the Census Bureau's Annual Economic Surveys

Reactions and implications for the Federal Reserve

Kim Bayard December 10, 2021



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 \rightarrow Better policies

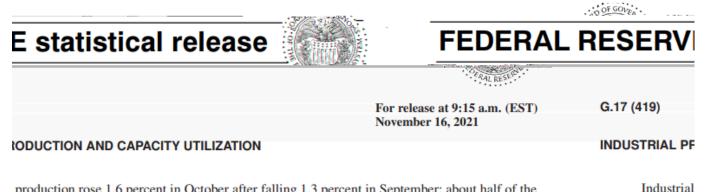


Annual Data: FRB uses

- **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

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Annual Census data: Direct use



production rose 1.6 percent in October after falling 1.3 percent in September; about half of theIndustrialeflected a recovery from the effects of Hurricane Ida. Manufacturing output increasedgain in October rtober; excluding a large gain in the production of motor vehicles and parts, factory output1.2 percent in Oc

(over)

on and Capacity Utilization: Summary

	2017=100						Percent change						
	2021						2021						Oct. '20 to
m	May	June	July	Aug."	Sept."	Oct. ^p	May	June	July	Aug."	Sept."	Oct. ^p	Oct. '21
	99.9	100.4	101.3	101.3	100.0	101.6	.7	.5	.8	.0	-1.3	1.6	5.1
	99.9	100.4	101.4	101.3	100.0		.7	.5	1.0	1	-1.3		
	99.8	99.8	101.6	101.4	100.3	101.6	.7	.0	1.8	1	-1.1	1.3	5.0
	100.1	99.7	100.8	100.8	99.3	100.7	.6	3	1.0	.0	-1.5	1.4	2.6
	93.8	93.3	96.3	95.7	95.4	95.5	1.6	5	3.3	7	3	.2	5.9
15	96.6	96.3	97.2	97.7	97.8	98.4	.0	4	.9	.5	.2	.6	3.7
	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 Producti Seasonally adjusted

Industrial production

Total index Previous estimates

Major market groups Final Products Consumer goods Business equipment Nonindustrial supplie 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 newlyreleased 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!