

INVESTIGATING ECONOMIC INDICATORS

WEBINAR SERIES

Measuring Our Economy: A Brief Overview of the Census Bureau's Economic Indicators

April 8, 2015

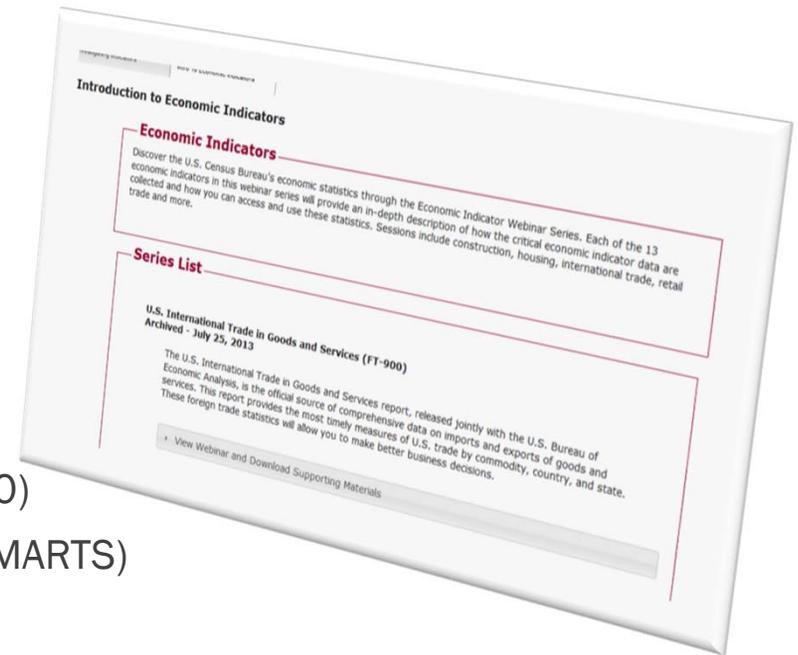
Prior Webinar Series

Available at: www.census.gov/econ/webinar

“Intro to Economic Indicators” Tab

Webinars Include:

- U.S. International Trade in Goods and Services (FT-900)
- Advance Monthly Sales for Retail and Food Services (MARTS)
- New Residential Construction and Sales (NRC & NRS)
- Monthly Wholesale Trade Survey (MWTS)
- Quarterly Financial Report – Manufacturing, Mining, Wholesale Trade, and Selected Service Industries (QFRM) & Retail Trade (QFRR)
- Advance Report on Durable Goods Manufacturers' Shipments, Inventories, and Orders (AdvM3) & Manufacturers' Shipments, Inventories, and Orders (M3)
- Housing Vacancies and Homeownership (HVS)
- Construction Put in Place (VIP)
- Quarterly Services Survey (QSS)



Webinar Series Overview

Date	Webinar Topic
April 8, 2015	Measuring Our Economy: A Brief Overview of the Census Bureau's Economic Indicators
May 20, 2015	Navigating Indicator Databases
July 8, 2015	Understanding Construction and Housing Statistics
August 19, 2015	Manufacturing, Products, and Goods Across Indicators
September 23, 2015	Measuring Our Evolving Economy: Exploring the Quarterly Financial Report and Quarterly Services Survey's Role in Tracking the Service Industries
TBA	Wholesale, Retail, and International Trade Indicators in a Global Marketplace
TBA	The Building Blocks of Gross Domestic Product (GDP)
TBA	Matching Monthly Indicators to Annual Surveys and 5-Year Economic Censuses: How the Data Relates
TBA	Putting Indicator Data to Work for You

Dates subject to change.

Webinar Overview

- Review Economic Indicators
- Explain Why they are important
- Q&A



What is an Economic Indicator?

Economic Indicator

- Data about economic activity
 - Allows analysis of economic performance and/or predictions of future performance.
 - Timely
- Has the potential to move the financial markets

Principal Federal Economic Indicator

- Defined by the Office of Management and Budget
- Census produces 13 of the 38



Definitions Used in the Webinar

- North American Industry Classification System (NAICS) - The standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.
- Recession –The National Bureau of Economic Research (NBER) defines recession as "a period of falling economic activity spread across the economy, lasting more than a few months."



U.S. Census Bureau Economic Indicators

- Advance Report on Durable Goods Manufacturers' Shipments, Inventories, and Orders
- Manufacturers' Shipments, Inventories, and Orders
- Monthly Wholesale Trade
- Advance Monthly Sales for Retail and Food Services
- Manufacturing and Trade Inventories and Sales
- Quarterly Services Survey
- Quarterly Financial Report – Manufacturing, Mining, Wholesale Trade, and Selected Service Industries
- Quarterly Financial Report – Retail Trade
- New Residential Construction
- New Residential Sales
- Construction Spending or Value of Construction Put in Place
- Housing Vacancies and Homeownership
- U.S. International Trade in Goods and Services



Major Users

- **Bureau of Economic Analysis (BEA)**
 - 12 of 13 go into GDP (Gross Domestic Product)
- **White House**
 - Council of Economic Advisors
- **Federal Reserve Board**
 - Monetary Policy
- **Congress**
- **State and Local Governments**
- **Press**
- **Investors**
 - Move Markets
- Business owners
- Retailers
- Manufacturers
- Realtors
- Entrepreneurs
- Service providers
- Students
- Teachers
- Researchers
- Economists
- Community leaders
- Other Government Organizations

New Orders for Manufactured Goods ↓ -0.2° %
January 2015



[Advance Report on Durable Goods Manufacturers' Shipments, Inventories, and Orders](#)

[Full Report on Manufacturers' Shipments, Inventories, and Orders](#)

www.census.gov/manufacturing/m3

(*) Statistical significance is not applicable or not measurable for these surveys. The Manufacturers' Shipments, Inventories and Orders estimates are not based on a probability sample, so we can neither measure the sampling error of these estimates nor compute confidence intervals.

M3: Background

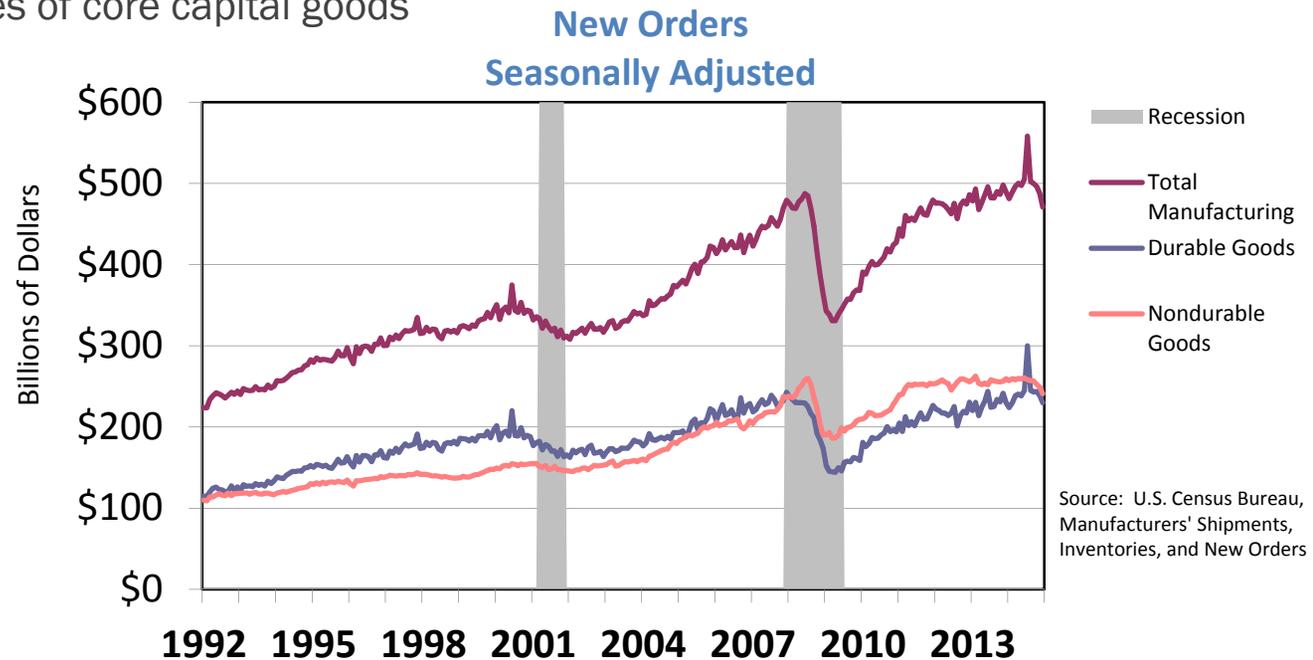
Advance Report on Durable Goods Manufacturers' Shipments, Inventories, and Orders & Full Report on Manufacturers' Shipments, Inventories, and Orders

- Monthly estimates for 65 industry categories in NAICS Sector 31-33
 - Value of Shipments
 - New Orders, & Order Backlog
 - Inventory: Total Inventory, Materials and Supplies Inventory, Work in Process Inventory, Finished Goods Inventory
 - Seasonally adjusted and not seasonally adjusted
 - Current series available back to January 1992, selected historical data available back to 1957
- Survey of 3,000 Manufacturing companies
 - Focus on companies with \$500 million or more in annual shipments
 - Divisions of diversified large companies
 - Large homogenous companies
 - Single unit manufacturers
 - 100% Electronic Data Collection



M3: Importance

- Measures future economic activity
 - Conference Board for preparing the Index of Leading Economic Indicators
 - Leading data – new orders
- Measures current health of manufacturing
 - Shipments and Inventories
- Capital Investment
 - New order values of core capital goods



Wholesale Inventories ↑ +0.3*%
January 2015

Wholesale Sales ↓ -3.1%
January 2015



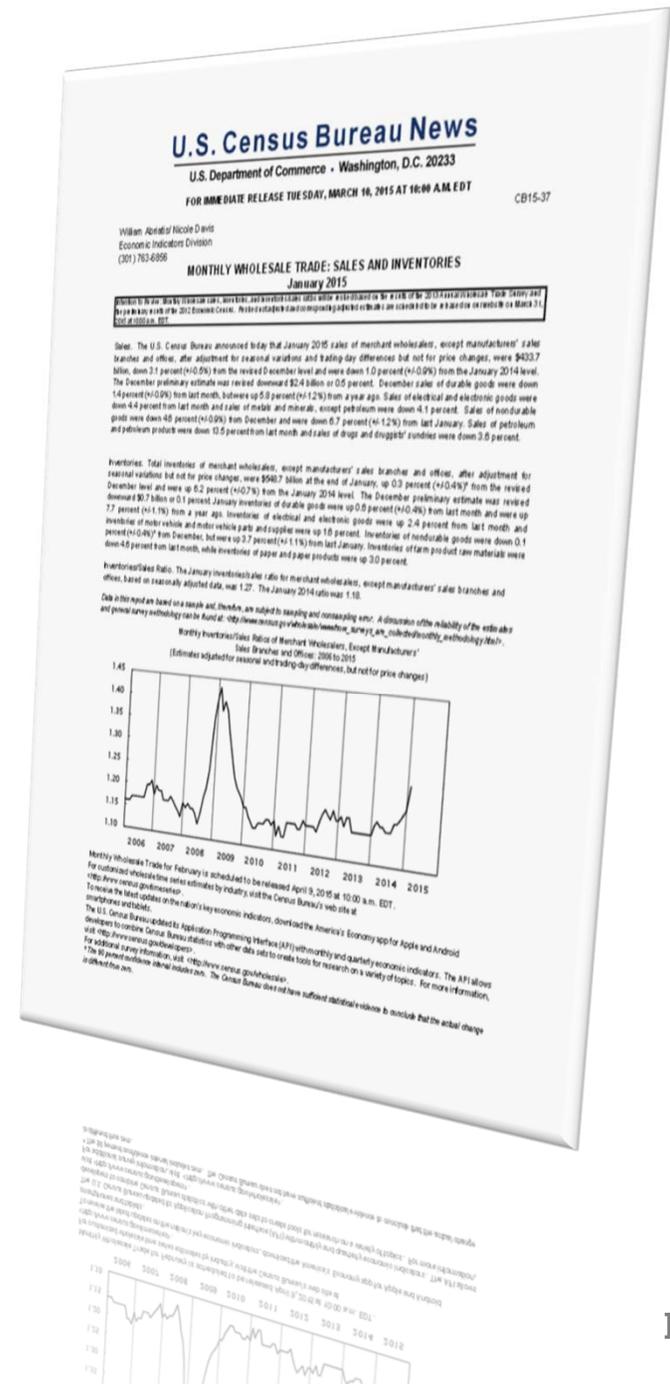
Monthly Wholesale Trade Survey

www.census.gov/wholesale

(*) The 90% confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

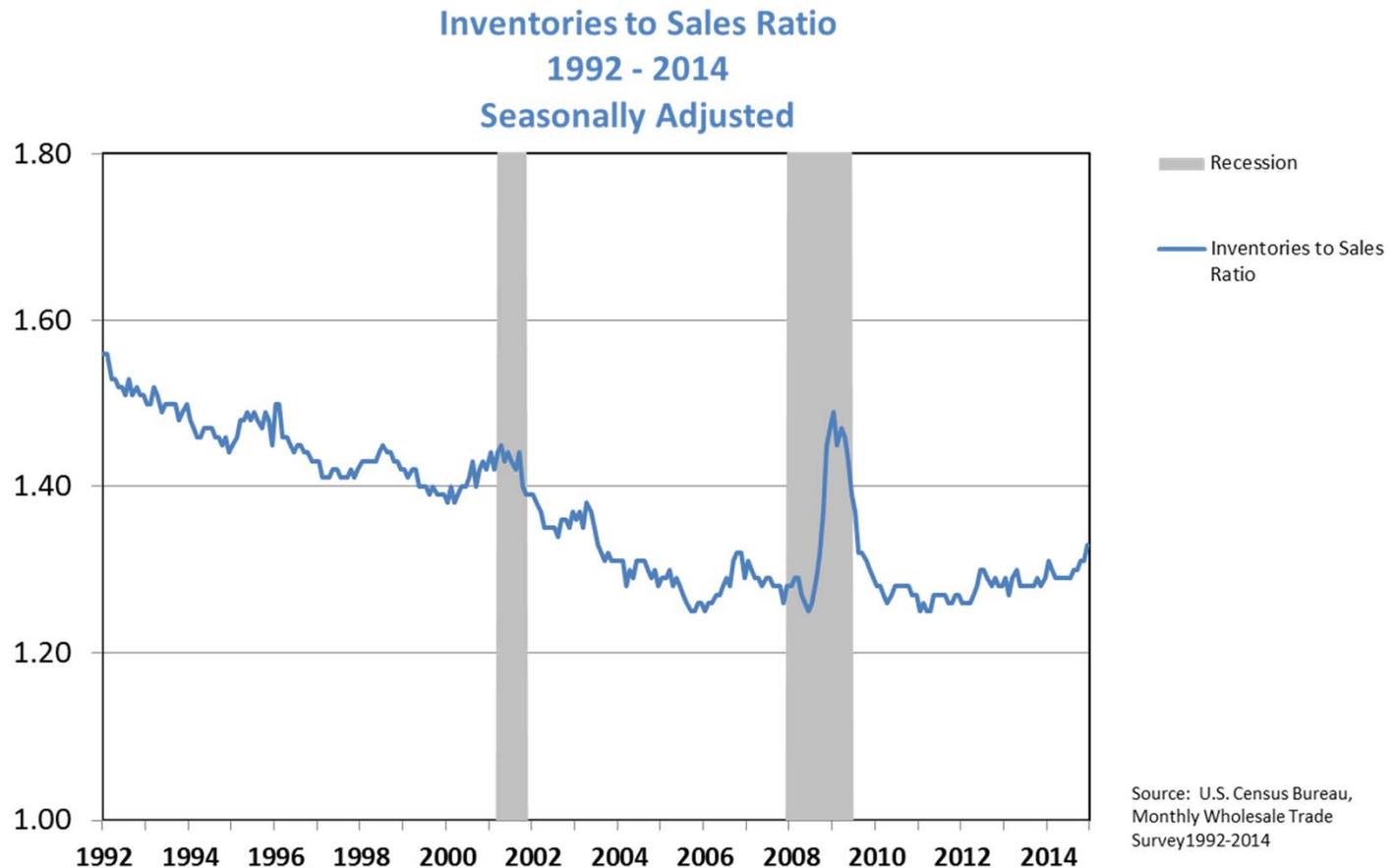
MWTS: Background

- Month-to-Month trends of Sales and Inventories of Wholesalers
 - Historic data dating back to 1936
 - Current time series on NAICS back to 1992
 - Released approximately 40 days after close of reference month
 - Sales, Inventories, Inventories/Sales ratios, and standard errors
- Survey of U.S. Wholesale Distributors (NAICS 42)
 - Excludes manufacturers' sales branches and offices (MSBOs).
 - Industry examples include:
 - Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers
 - Farm Product Raw Material Merchant Wholesalers
 - Petroleum and Petroleum Products Merchant Wholesalers



MWTS: Importance

- Input to GDP
- Provides only available government measure of monthly estimates of wholesale trade activity.



Retail and Food Services Sales ↓ -0.6%
February 2015

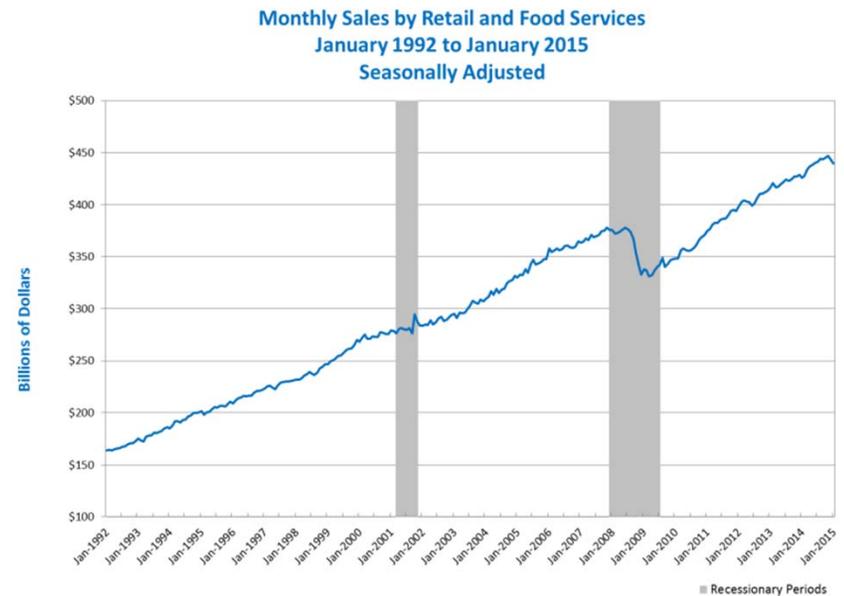


Advance Monthly Sales for Retail and Food Services

www.census.gov/retail

MARTS: Background

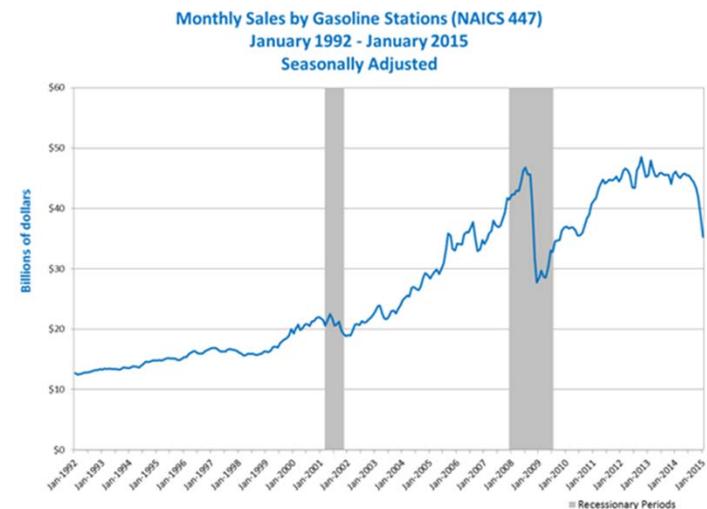
- Month-to-Month change in Sales for Retail and Food Service
 - Monthly (9 business days after reference month)
 - Advance Retail Sales estimates for reporting month
 - Preliminary Sales data for previous month
- Industry Coverage
 - Retail and Food Service Companies (NAICS Sector 44-45 & Sector 72, subsector 722). For example:
 - Motor Vehicle and Part Dealers
 - Furniture Stores
 - Gasoline Stations
 - Clothing and Clothing Accessories Stores
 - Electronic Shopping and Mail-Order Houses



Source: U.S. Census Bureau, MARTS

MARTS: Importance

- Earliest available government measure of monthly retail sales estimates of broad based retail trade activity
- Leading Economic Indicator – used by policy makers, investors, large companies, consultants, etc.
- Federal Reserve Board
- Bureau of Economic Analysis (BEA)
 - Significant input into the consumer component of Gross Domestic Product (GDP)
- Bureau of Labor Statistics (BLS)
 - Consumer Price Indexes & Productivity Measurements
- Businesses
 - Measure against their performance and future demand



End-of Month Inventories
January 2015

0.0*%



Manufacturing and Trade Inventories and Sales

www.census.gov/mtis

(*) The 90% confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

MTIS: Background

- Estimates in the report are based on data from three surveys:
 - Monthly Retail Trade Survey (MRTS)
 - Monthly Wholesale Trade Survey (MWTS)
 - Manufacturers' Shipments, Inventories, and Orders Survey (M3)
- Released approximately 43 days after close of reference month
- Preliminary current month estimates and final data for previous month
- Data Items include:
 - Total Business Sales
 - Total Business Inventories
 - Inventories/Sales Ratios

MTIS: Importance

- Provides the first monthly estimates of Retail Inventories
- Provides broad economic view across three major sectors of economy.

Total Business Inventories/Sales Ratios: 2006 to 2015
(Data adjusted for seasonal, holiday and trading-day differences but not for price changes)



Source: U.S. Census Bureau, MTIS

Health care and social assistance ↑ 4.2%
Fourth Quarter 2014

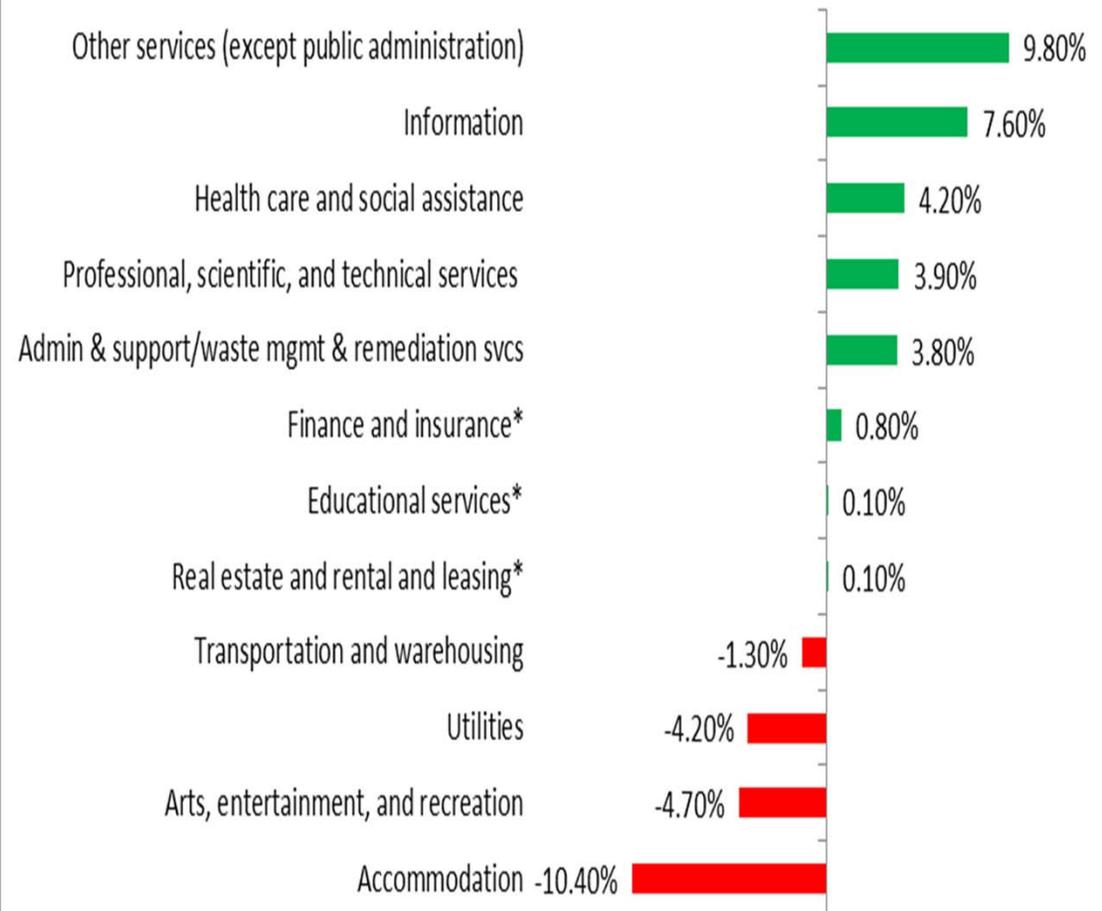


Quarterly Services Survey
www.census.gov/services

QSS: Background

- Measuring Service Industries
 - Began in 2004
 - Quarterly
 - Revenue
 - Source of Revenue
 - Expenses (non-profit)
 - Hospitals inpatient days and discharges
 - Select industries are seasonally adjusted
- Sample Characteristics
 - Reselected every 5 to 7 years
 - 19,000 Businesses
 - Sub-sample of the Service Annual Survey

How Revenue By Sector Changed from Q3 to Q4 in 2014

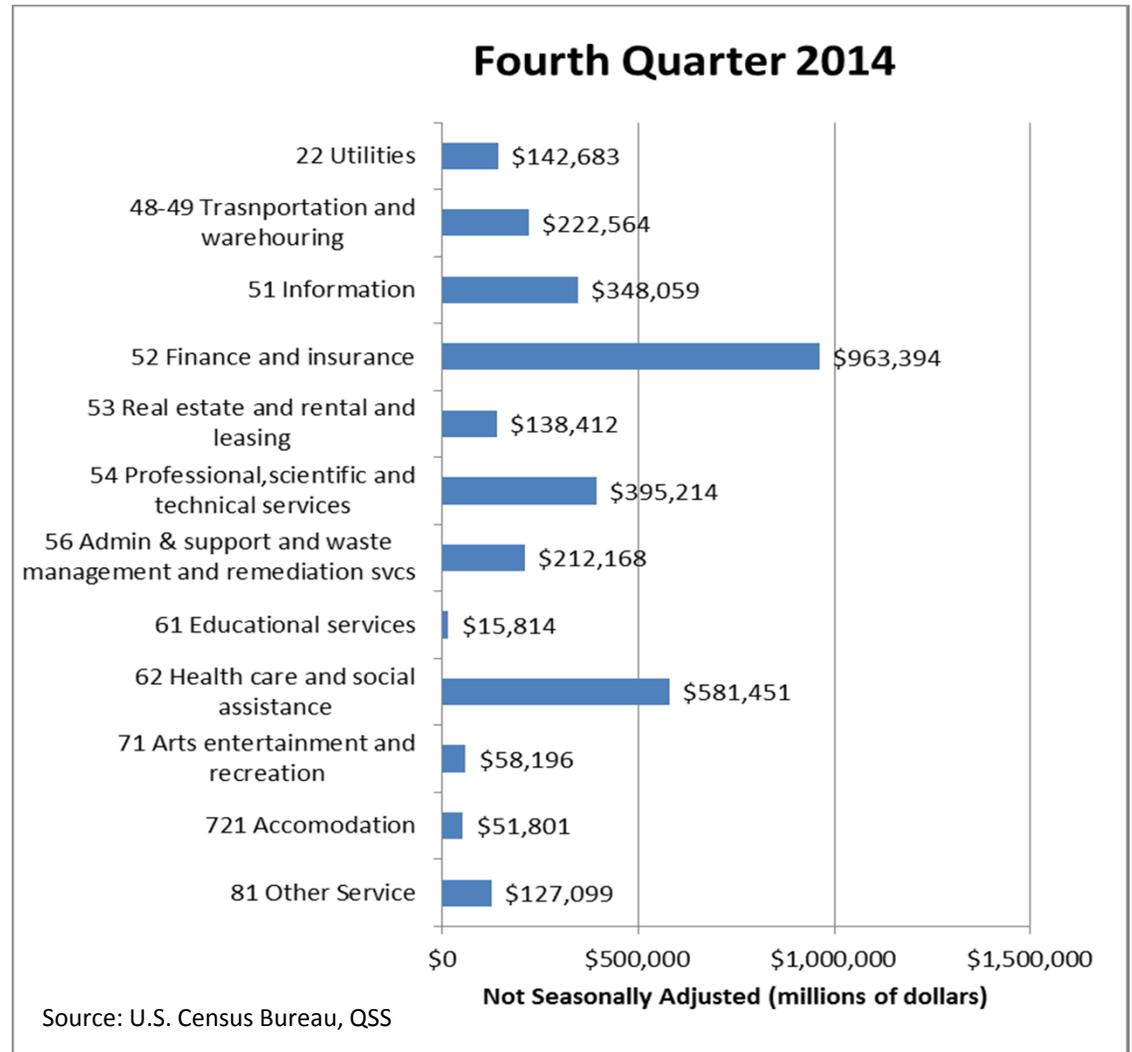


*The 90 percent confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Source: U.S. Census Bureau, QSS

QSS: Growing Importance

- Services revenue make up over 50% of GDP, prior to QSS only annual data were available
 - Initially - covered 3 sectors
 - Currently - covering 12 sectors
- GDP-by-Industry
 - Added in April 2014
- Medicare & Medicaid
 - National Health Expenditures projections



Manufacturers' after-tax profits ↓ -\$10.7 Billion
Retailers' after-tax profits ↑ \$7.4 Billion

4th Quarter 2014



Quarterly Financial Report – Manufacturing, Mining,
Wholesale Trade and Selected Service Industries

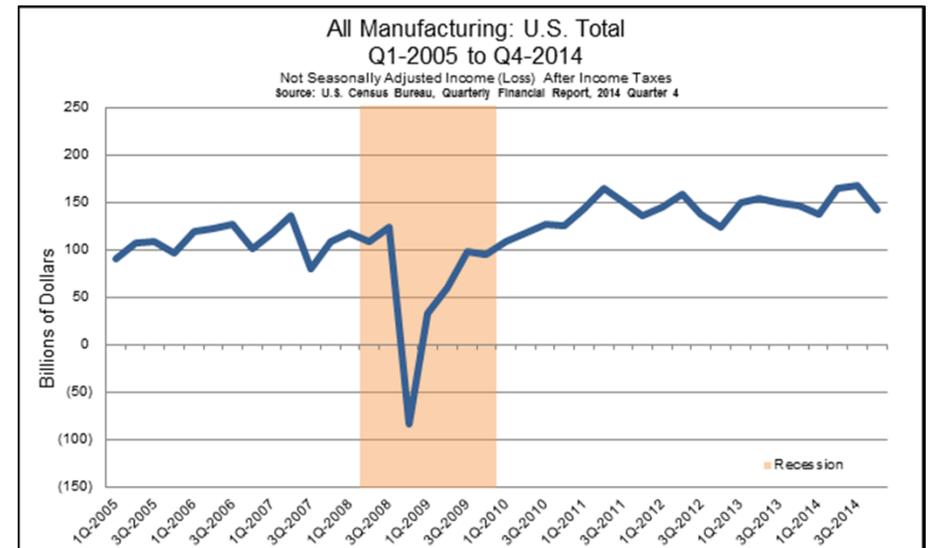
Quarterly Financial Report – Retail Trade

www.census.gov/econ/qfr

QFR: Background

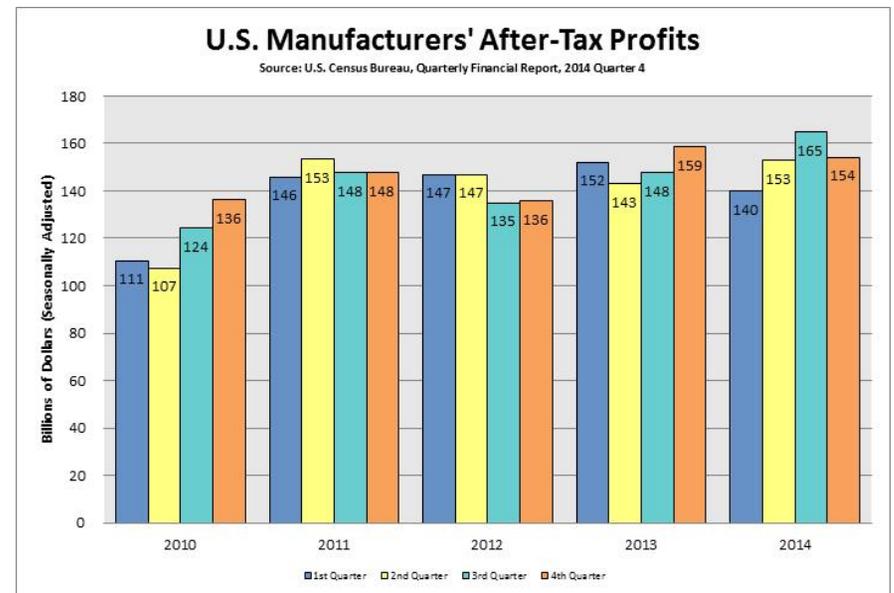
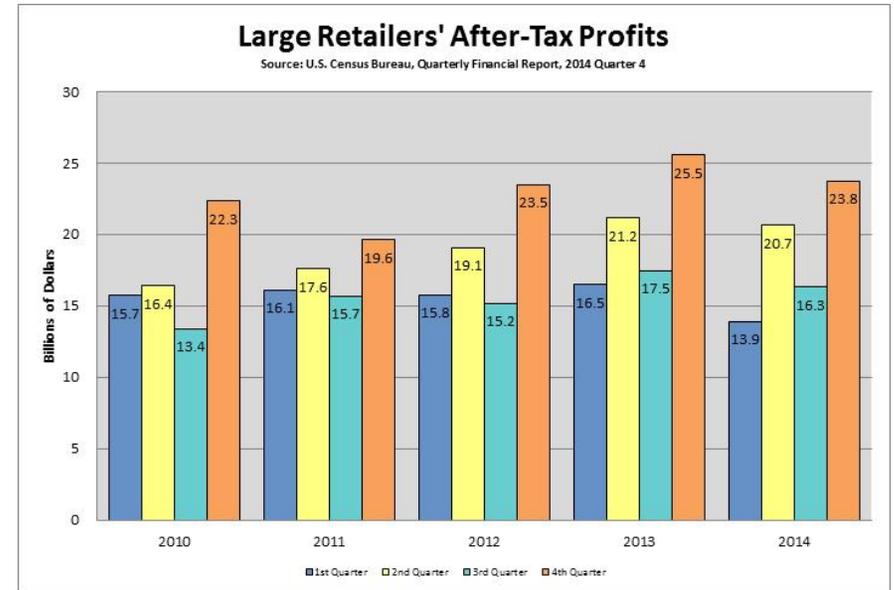
Manufacturing, Mining, Wholesale Trade, Retail Trade & Selected Service Industries

- Corporate financial conditions
 - Privately and publicly held non-financial corporations
 - 63 data points including: sales, profits, assets, liabilities, stockholders' equity, and related accounts and ratios
 - Small, medium, and large corporations (manufacturing)
 - Historical data spans over 65 years
- Sample survey of 13,000 companies
 - Participant Corporations
 - Manufacturing - \$250,000 in assets
 - All Others - \$50 million in assets
- Service Sector Expansion (2010)
 - Information, professional and technical services



QFR: What Makes It Important

- Individual Companies
 - Compare performance and financial condition
 - Business cases for financing & loans
- Bureau of Economic Analysis
 - National Income and Products Accounts (NIPAs)
 - Gross Domestic Income (GDI)
 - Gross Domestic Product (GDP)
- Federal Reserve Board
 - Flow of Funds Accounts
 - Federal Open Market Committee
- Small Business Administration
 - Estimate financial performance of small businesses



Privately Owned Housing Starts ↓ 17.0%
February 2015



New Residential Construction

www.census.gov/construction/nrc

New Residential Sales

www.census.gov/construction/nrs

NRC & NRS: Sources

New Residential Construction

- Units authorized by permits, started, completed
- Monthly (12 workdays after reference month)

New Residential Sales

- New homes sold and for sale
- Monthly (17 workdays after reference month)

Building Permits Survey (units authorized) – indicator with most geographic detail

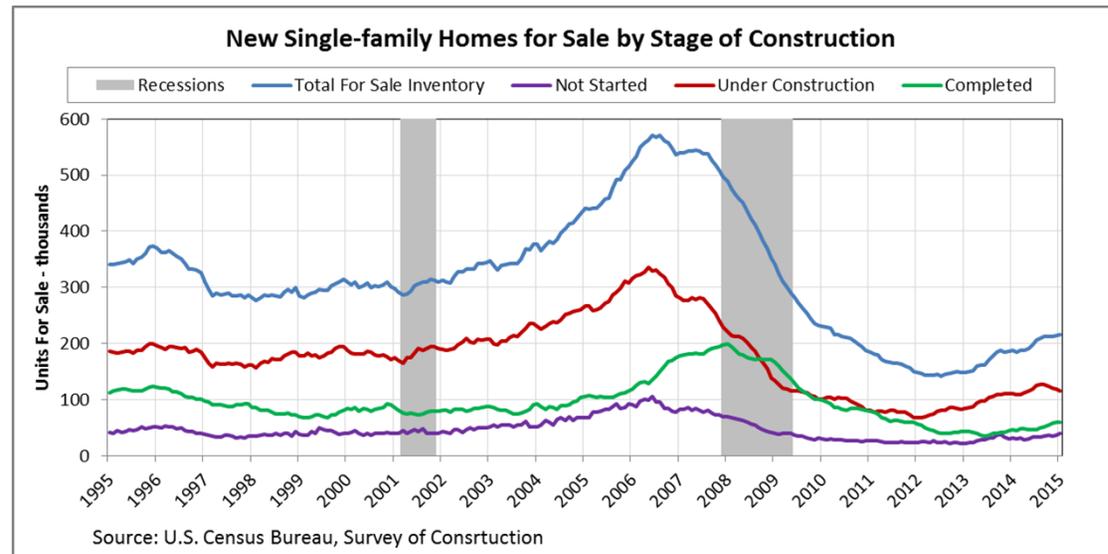
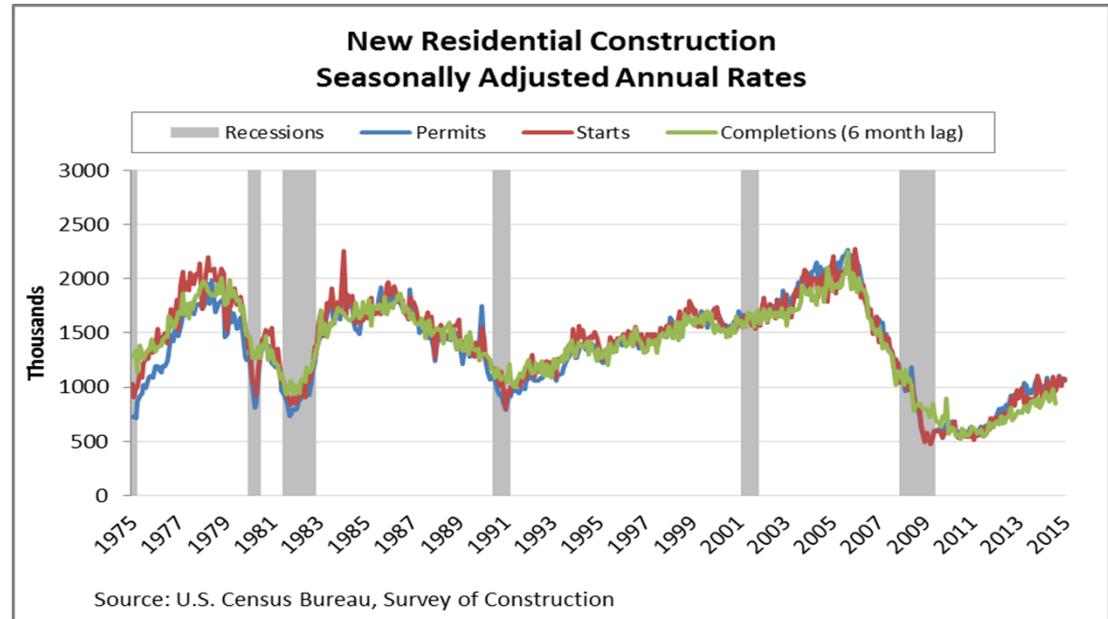
- 20,000 local permit-issuing jurisdictions (8,500 surveyed monthly)
- Number and valuation of new housing units authorized
- Local data available for all jurisdictions

Survey of Construction

- Monthly sample of building permit authorizations from about 900 permit-issuing jurisdictions
- Sampled land areas where permits are not required are also canvassed to locate new construction
- New housing units started, completed, & sold
- Prices & characteristics

NRC & NRS: Importance

- State of the nation's housing
 - Department of Housing and Urban Development (HUD) – also helps fund survey
 - Policy Makers – tax credits for homebuyers, etc.
- Inflation in prices of new homes
 - Insurance Companies
 - The Department of Veterans Affairs
- Census population estimates
 - Use building permits to help measure migration by county
- Construction material demand
 - Manufacturers
 - Sellers of construction materials or equipment



Total Construction Activity ↓ 1.1*%
January 2015



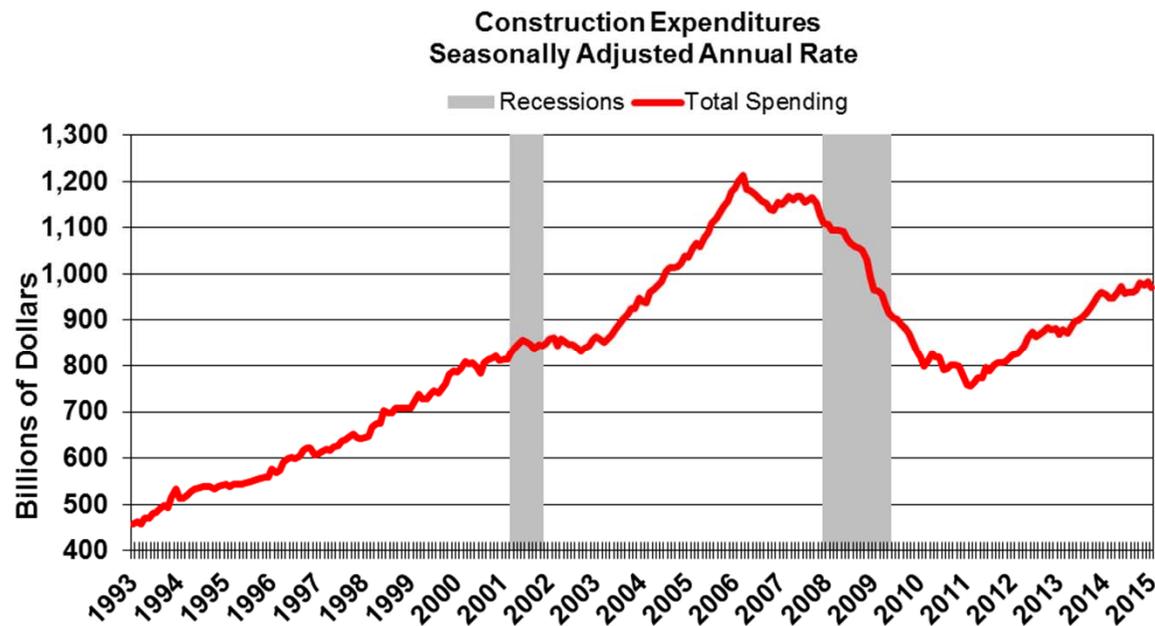
Construction Spending (or Value of Construction Put in Place - VIP)

www.census.gov/construction/c30/c30index.html

(*) The 90% confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Construction Spending: Data & Importance

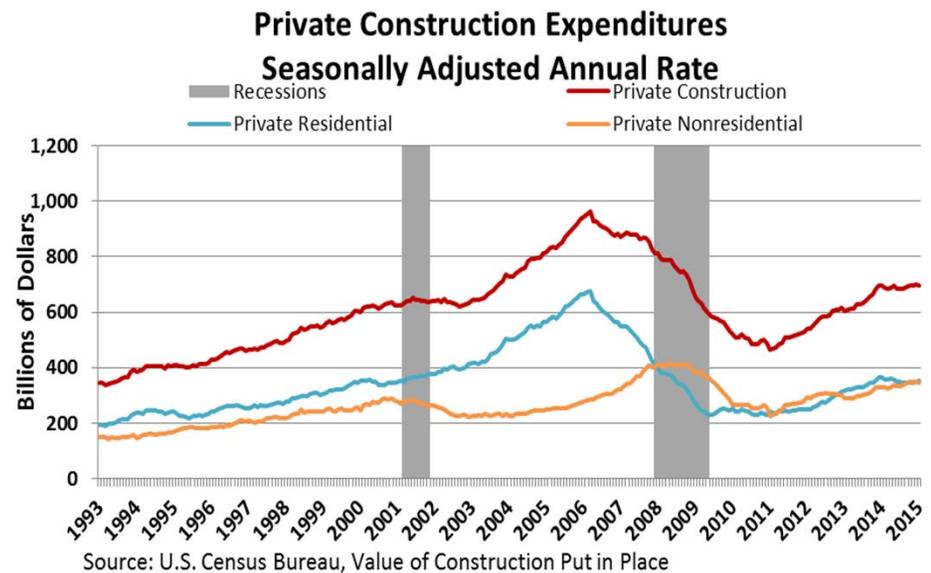
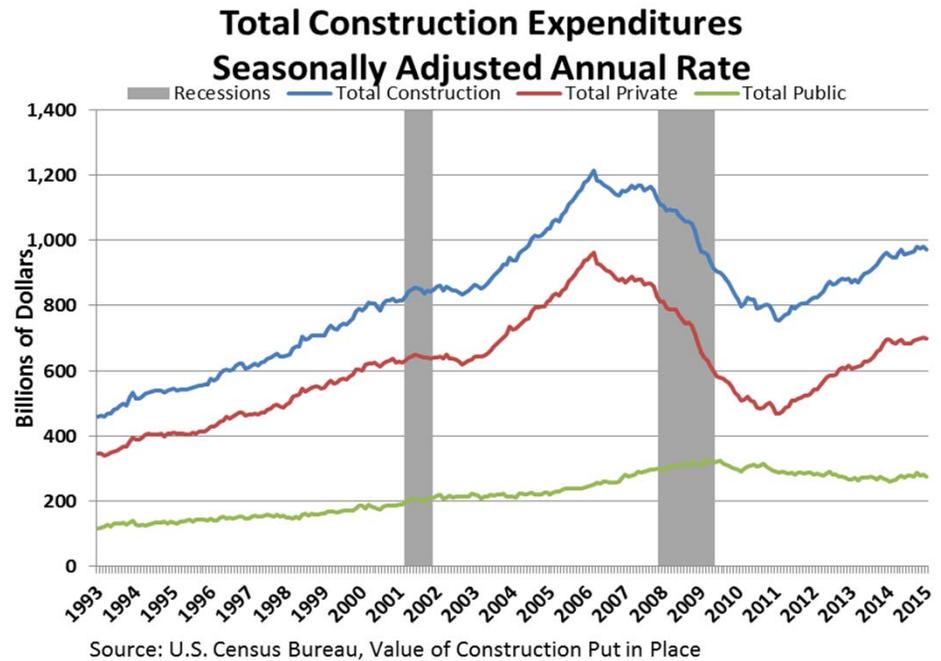
- Construction Spending
 - Monthly (released the first workday two months after reference month)
 - By ownership type: private, state and local, federal
 - By type of construction: residential, commercial, health care, education, highway, etc.
- Construction makes up approximately 5% of GDP



Source: U.S. Census Bureau, Value of Construction Put in Place

Construction Spending: Data Collection

- Data are collected by project from start to completion
- 4 Construction Progress Reporting Surveys
 - Privately-owned nonresidential construction
 - State and local construction
 - Federal construction
 - Privately-owned multifamily construction
- Other sources:
 - Private Single-family (derived from Survey of Construction)
 - Residential Improvements (derived from Consumer Expenditure Survey)
 - Other sectors (collected from private and public organizations)



Rental Vacancy Rate
Fourth Quarter 2014

↓ 0.4 percentage
points

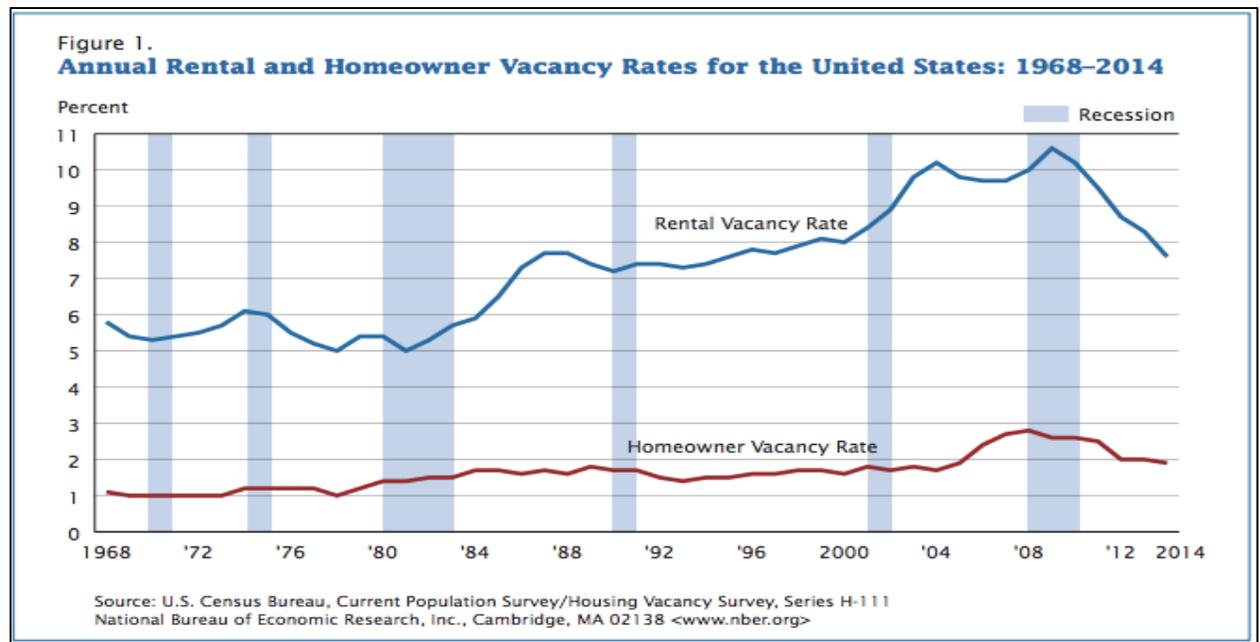


Housing Vacancies and Homeownership

www.census.gov/housing/hvs

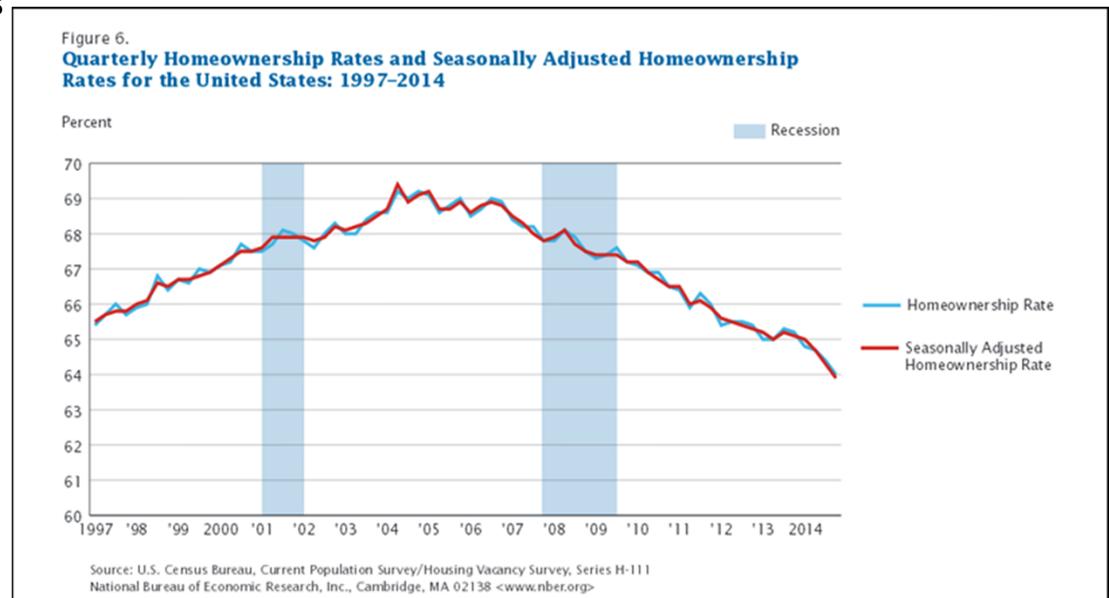
HVS: Background

- Rental and Homeowner Vacancy Rates and Homeownership Rates
 - Housing inventory estimates, characteristics of vacant units available, percent distributions
 - US, regions, states, and the 75 largest Metropolitan Statistical Areas
 - Quarterly (approximately 28 days after the reference quarter)
 - Historical data back to 1956
- Data Source
 - Current Population Survey (CPS) – Occupied data, Housing Vacancy Survey (HVS) – Vacancy data
 - A unit is in the CPS/HVS survey for 4 consecutive months, out for 8 months, then back in for 4 months before leaving the sample permanently



HVS: What Makes It Important

- Recent Downturn in Economy – Housing Bubble
 - Homeownership & vacancy rates
- Department of Housing and Urban Development (HUD)
 - Evaluate the need for new housing programs and initiatives
- Economists/Realtors
 - Housing formation (forecast)
- National Association of Homebuilders (NAHB)
 - Forecast project demand for builders
- Fannie Mae & Freddie Mac
 - Mortgage market



Trade Balance ↓ \$ - 41.8^o Billion
January 2015

Exports ↓ \$189.4^o Billion
January 2015

Imports ↓ \$231.2^o Billion
January 2015



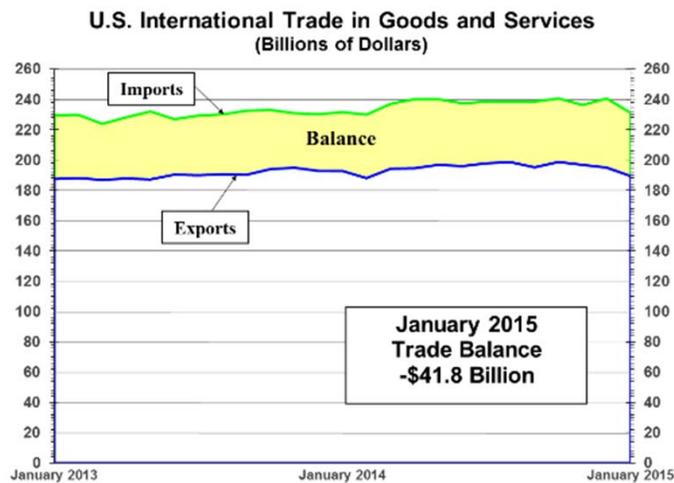
U.S. International Trade in Goods and Services

www.census.gov/trade

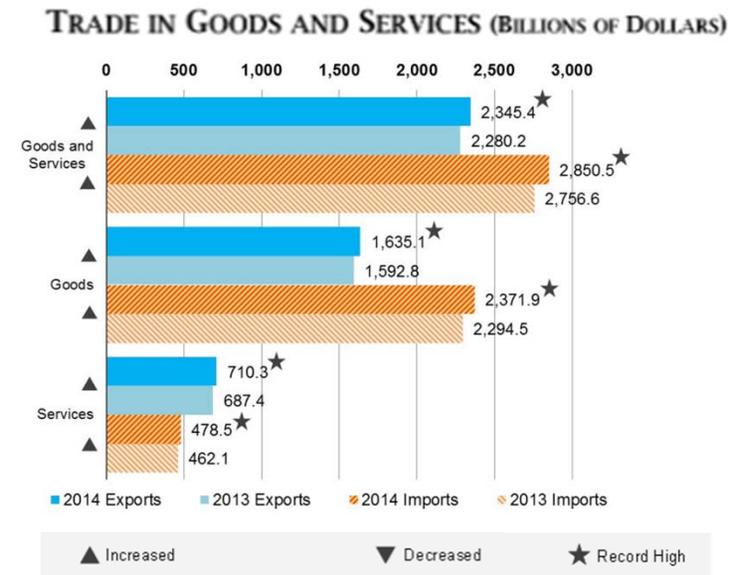
(*) Statistical significance is not applicable or not measurable for these surveys.

FT-900: Background

- Joint Release with the Bureau of Economic Analysis (BEA)
 - Census – Goods Data (Customs documentation, Automated Export System, Statistics Canada)
 - BEA – Services Data (surveys, administrative data, industry reports, partner countries) and adjustments for balance of payments.
- Exports, Imports and the Balance of Trade
 - Monthly (34-36 days after the calendar month)
 - Commodity, Country, and State level detail in NAICS, End-Use, and Harmonized System



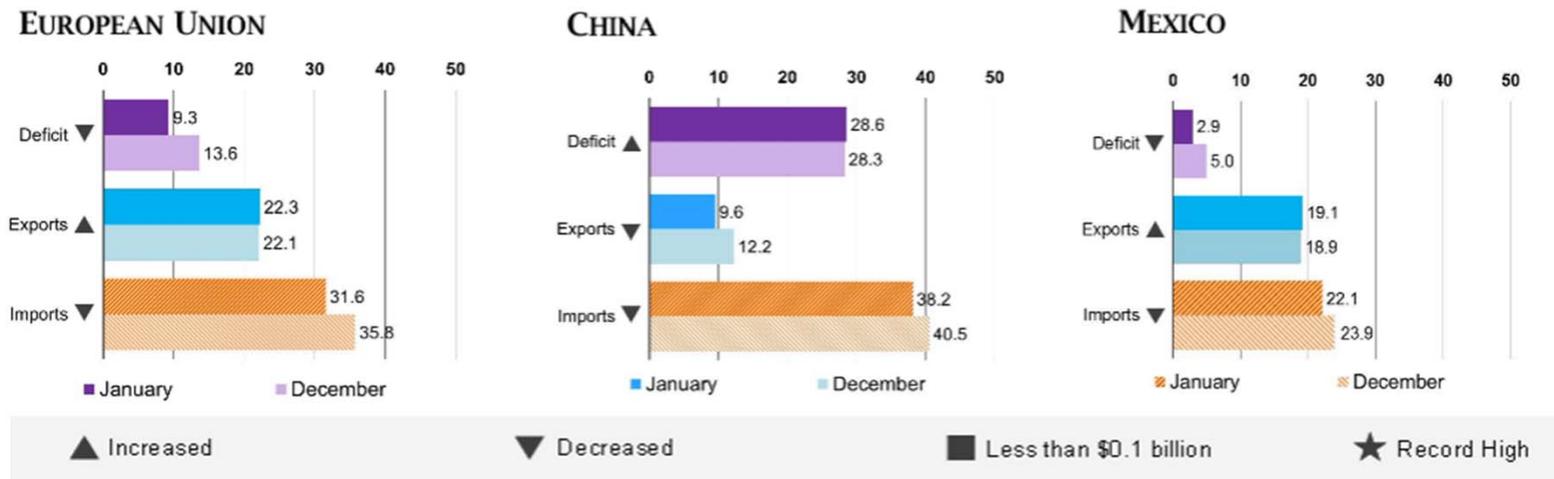
Source: U.S. Census Bureau, International Goods and Services Report



FT-900: What Makes It Important

- Key component of GDP
- Affects Trade Policy
 - Free Trade Agreements
 - Address and resolve trade disputes
- Target Markets
 - Companies – market research
 - State and Local Governments – promotions and missions

GOODS BY GEOGRAPHIC AREA
(BILLIONS OF DOLLARS, NOT SEASONALLY ADJUSTED)



Source: U.S. Census Bureau, International Goods and Services Report, January 2015

America's Economy: Mobile App

Indicators Available:

- Advance Monthly Retail Sales
- Advance Report Durable Goods
- Business Inventories
- Construction Spending
- Consumer Price Index
- Homeownership Rate
- International Trade
- Manufacturers' Goods
- Monthly Wholesale
- New Residential Construction
- New Residential Sales
- Nonfarm Payroll
- Personal Income
- Producer Price Index
- QFR–Manufacturing
- QFR–Retail Trade
- Quarterly Services Survey
- Real Gross Domestic Product
- Unemployment Rate



www.census.gov/mobile

Available for iPhone, iPad, and
Android devices

Upcoming Webinars

Navigating Indicator Databases

Have you ever wanted to find specialized indicator data but did not know where to look? In this webinar, learn how to navigate Census Bureau databases to find Economic Indicator data.

May 20th @ 1:00 PM EST

Understanding Construction and Housing Statistics

Do you want to learn more about the relationship between New Residential Construction, New Residential Sales, and Construction Spending? Are you interested in how housing and construction indicators relate to other federal and private sector data? In this webinar, we will explore these relationships and clarify common misunderstandings about the data.

July 8th @ 1:00 PM EST

&

many
more

Visit www.census.gov/econ/webinar for a complete list of upcoming webinars

For More Information & Feedback

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Web site: <http://www.census.gov/economic-indicators/>

Webinar Website: <http://www.census.gov/econ/webinar>

INVESTIGATING ECONOMIC INDICATORS

WEBINAR SERIES

Questions?

April 8, 2015