Older People Working Longer, Earning More

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U.S. Census Bureau

LED Webinar
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Disclaimer

Any opinions and conclusions expressed herein are those of the author and do not necessarily represent the views of the U.S. Census Bureau.

All results have been reviewed to ensure that no confidential information is disclosed.
Goals of this Presentation

(1) The motivation for today’s talk
   -- Review the 2017 Census Bureau Population Projections
   -- With a focus on baby boomers

(2) Current labor market statistics for older workers
   -- BLS statistics
   -- LEHD Quarterly Workforce Indicators (QWIs)

(3) Takeaway
   -- Labor market status of older workers is changing
     They are working longer and earning more
   -- QWI statistics are a powerful tool for analyzing these changes
Population Statistics from U.S. Census Bureau
Table PEPSYASEXN

<table>
<thead>
<tr>
<th>Age</th>
<th>Total</th>
<th>Male Estimate Baseline</th>
<th>Female Estimate Baseline</th>
<th>Population Estimate (as of May 1)</th>
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<td>325,735,282</td>
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</table>
Population Statistics from U.S. Census Bureau
Table PEPSYASEXN

Population Estimates: 2010
Population Statistics from U.S. Census Bureau
Table PEPSYASEXN

Population Estimates: 2010 (Red) and 2017 (Blue)
US Birth Rate (births per 1000 population)

Baby boom (births 1946-1964) in orange

Population Statistics from U.S. Census Bureau
Table PEPSYASEXN

Population Estimates: 2010 (Red) and 2017 (Blue)

Baby boom is 1946-1964 births
Age 46-64 in 2010
Age 53-71 in 2017
Population Statistics from U.S. Census Bureau
Table PEPSYASEXN

Population Estimates: 2010 (Red) and 2017 (Blue)

- Baby boom is 1946-1964 births
- Age 46-64 in 2010
- Age 53-71 in 2017

Population is getting older:

- Median age in 2010 is 37.2
- Median age in 2017 is 38.0
Population Projections

FOR IMMEDIATE RELEASE: TUESDAY, MARCH 13, 2018
Older People Projected to Outnumber Children for First Time in U.S. History
March 13, 2018 ("REVISED SEPT. 6, 2018")
Release Number CB18-41

2030 Marks Important Demographic Milestones for U.S. Population

SEPT. 6, 2018 — The year 2030 marks an important demographic turning point in U.S. history according to the U.S. Census Bureau’s 2017 National Population Projections. By 2030, all baby boomers will be older than age 65. This will expand the size of the older population so that 1 in every 5 residents will be retirement age.

“The aging of baby boomers means that within just a couple decades, older people are projected to outnumber children for the first time in U.S. history,” said Jonathan Vespa, a demographer with the U.S. Census Bureau. “By 2035, there will be 78.0 million people 65 years and older compared to 76.7 million under the age of 18.”
Motivation for Today’s Talk

• According to the Census Bureau’s Population Projections:
  ➢ By 2030, all baby boomers will be older than age 65.
  ➢ By 2030, 20% of residents will be of retirement age
    (the 2017 statistics is 14.5%).

• Accompanying these population projections was an America Counts story describing the labor market status of older workers today. Today’s webinar is an expanded version of this America Counts story.
BLS Statistics on Older Workers
Annual Averages, 1993-2018

Employment, Persons 65 years and over
Source: BLS Internet (LNU02000097)
BLS Statistics on Older Workers
Annual Averages, 1993-2018

Employment, Persons 65 years and over
Source: BLS Internet (LNU02000097)

Employment-Population Ratio, Age 65+
Source: BLS Internet (LNU02300097)
BLS Statistics on Older Workers
Annual Averages, 1993-2018

Change in employment-to-population ratio for persons aged 65+
- Total: ↑8.0 (74%)
- Men: ↑8.2 (54%)
- Women: ↑7.5 (95%)
E/P Ratios by Age Group
Annual Averages, 1993-2018

Change in employment-to-population ratio by age

16-19: ↓ 11.1 (27%)
20-24: ↓ 2.7 (4%)
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25-54: ↑ 0.8 (1%)
55-64: ↑ 9.3 (17%)
E/P Ratios by Age Group
Annual Averages, 1993-2018

Change in employment-to-population ratio by age

16-19: ↓11.1 (27%)
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25-54: ↑0.8 (1%)
55-64: ↑9.3 (17%)
65+: ↑8.0 (74%)
Earnings of Older Workers

The last several slides used BLS data to show the rising employment-to-population ratio of older workers.

We now transition to earnings statistics, and we move to LEHD data.
Earnings of Older Workers

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We now transition to earnings statistics, and we move to LEHD data.

We could continue using BLS data, but we want to present detailed statistics, which are only available from the LEHD data.
LEHD Data: Overview

- Longitudinal Employer-Household Dynamics (LEHD)
  -- Longitudinally linked employer-employee microdata
  -- Created at the U.S. Census Bureau
  -- Microdata from the State UI administrative systems
    wage records and QCEW establishment data
  -- Enhanced with demographics (age, gender, ...)
  -- Enhanced with firm information (age, size)

- LEHD covers the universe of UI-covered jobs in the U.S.
  -- This large sample size enables publication of employment and earnings for detailed breakdowns by demographics, industry, ...
LEHD Data: Decisions

- Is non-seasonally adjusted quarterly data OK, or do we want [a] seasonally adjusted quarterly data or [b] annual averages?
  -- The following uses annual averages

- Do we use earnings for all jobs or for stable jobs?
  -- The following uses full quarter (stable) jobs, which are the middle quarter of 3 consecutive quarters at an employer
  -- This full quarter concept mimics full-time workers in BLS statistics

- Do we use nominal or real earnings?
  -- The following uses the GDP deflator to convert nominal to real
Extracting LEHD Data
Extracting LEHD Data
Extracting LEHD Data

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Emp</td>
<td>Estimate of the total number of jobs on the first day of the reference quarter. Beginning of quarter employment counts are similar to payroll employment measures, such as the OECD's (<a href="http://www.led.gov">www.led.gov</a>).</td>
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<tr>
<td>EmpEnd</td>
<td>Estimate of the number of jobs on the last day of the quarter.</td>
</tr>
<tr>
<td>EmpS</td>
<td>Estimate of stable jobs, i.e., the number of jobs that are held on both the first and last day of the quarter with the same employer. This is often, but not necessarily, the same as being employed for a full quarter (e.g., an on-call substitute teacher may have earnings in each of three consecutive quarters, but intermittently).</td>
</tr>
<tr>
<td>EarnS</td>
<td>Estimate of stable jobs in the quarter before the reference quarter. This measure is provided for certain special-purpose analyses.</td>
</tr>
<tr>
<td>EarnS</td>
<td>Average monthly earnings of employees with stable jobs (i.e., worked with the same firm throughout the quarter).</td>
</tr>
<tr>
<td>EarnS</td>
<td>Average monthly earnings of employees who worked on the first day of the reference quarter.</td>
</tr>
<tr>
<td>EarnS</td>
<td>Average monthly earnings for workers who started a job that lasted a full quarter. That is, average monthly earnings of full month's earnings, which includes both employees who worked on the first day of the quarter and those who started a job that lasted the entire quarter.</td>
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The selected indicators are: EmpS and EarnS.
Extracting LEHD Data
Extracting LEHD Data
Extracting LEHD Data

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</table>

Note: The table contains data for various economic indicators such as employment (EMP), earnings (EARN6), and earnings details (Earnings). The data is organized by periodicity, seasonal, and other economic classifications.
## Extracting LEHD Data

![Excel Data Table]

The image shows an Excel spreadsheet containing data extracted from LEHD (Labor Force Dynamics Database). The data includes columns for various economic indicators such as age group, race, education level, employment status, and more. Each row represents a different observation point, and the columns provide specific data points for analysis.

### Key Columns
- **Periodicity**: Frequency of data collection (quarterly, monthly, etc.).
- **Geographic Area**: Details about the geographic region where the data is collected.
- **Industry**: Specific industries under observation.
- **Employment Status**: Whether the individual is employed, unemployed, or not in the labor force.

### Example Data Rows
- **2003Q1**: Data for the first quarter of 2003, including employment status, hours worked, and earnings.
- **2003Q2**: Data for the second quarter of 2003, showing changes and trends in the labor force.

This dataset is crucial for economic analysis, providing insights into labor market dynamics, employment trends, and economic health.
Extracting LEHD Data
Real Earnings of All Full Quarter Workers
Real Earnings of All Full Quarter Workers

Real Average Monthly Earnings, Full Quarter Workers

Real Average Monthly Earnings, Full Quarter Workers, 1994=100
Real Earnings of All Full Quarter Workers

Real Average Monthly Earnings, Full Quarter Workers

3.8% average annual growth 1994-2000, 0.7% average annual growth 2000-2016
Real FQ Earnings of Older Workers

Real Average Monthly Earnings, Full Quarter Workers, By Age

Real Average Monthly Earnings, Full Quarter Workers, By Age, 1994=100


0 1,000 2,000 3,000 4,000 5,000 6,000

14-24 25-34


90 100 110 120 130 140 150 160 170 180 190

14-24 25-34
Real FQ Earnings of Older Workers

Real Average Monthly Earnings, Full Quarter Workers, By Age

Real Average Monthly Earnings, Full Quarter Workers, By Age, 1994=100

United States Census Bureau
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov
Real FQ Earnings of Older Workers

Real Average Monthly Earnings, Full Quarter Workers, By Age,

Real Average Monthly Earnings, Full Quarter Workers, By Age, 1994=100
Real FQ Earnings of Older Workers

1994-2000: all age groups have approximately 3.5% average annual earnings growth

2000-2016:
- age 14-24: ↓ 0.2%
- age 25-34: 0.0%
- age 35-44: ↑ 0.6%
- age 45-54: ↑ 0.8%
- age 55-64: ↑ 1.1%
- age 65-99: ↑ 3.1%
Diving Deep: Employment and Earnings of Older Workers, by Industry

• As mentioned earlier, we want to look at detailed employment and earnings statistics for older workers

• We look at industry detail
  -- We continue with full-quarter employment from the QWI statistics
  -- “Check all” for both age and industry in LED Extraction Tool
    The LED extraction tool is very quick (<5 minutes)
    The following charts took about 1-2 hours in excel
Employment Growth of FQ Older Workers, by Industry

Employment of older workers is growing in all industries over 1994-2016

Industries with the greatest growth are:
- Healthcare: ↑ 18%
- Retail Trade: ↑ 13%
- Acc & Food: ↑ 8%
- Prof & Tech: ↑ 8%
- Admin Supp: ↑ 8%
- Manufacture: ↑ 8%
Earnings Growth of FQ Older Workers, by Industry

The average earnings of FQ older workers is growing in all industries

Average annual 1994-2016:
- Prof & Tech: ↑ 5.5%
- Manufacture: ↑ 2.4%
- Healthcare: ↑ 3.7%
- Admin Supp: ↑ 3.7%
- Retail Trade: ↑ 1.7%
- Acc & Food: ↑ 2.9%
Summary

• The U.S. population is aging. The Census Bureau projects that within several decades, older people will outnumber children for the first time in U.S. history.

• We have examined the labor market of older workers over the past several decades using BLS and LEHD-QWI statistics:
  ➢ Older people are working longer. The employment to population ratio of persons aged 65+ has risen from 12% in the mid 1990s to 19% today.
  ➢ Older people are earning more. The average full-quarter earnings of persons aged 65+ has risen at more than 3% annually since the mid 1990s, which is a much higher rate than any other age group.

• The publicly available QWI statistics have much more detail not explored here (by state, by gender, ...).
Thank you for your interest

Comments & questions appreciated

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