Generations X and Y: Facing Economic and Financial Challenges in the Shadow of the Baby Boom

March 6, 2014

William R. Emmons
Center for Household Financial Stability
Federal Reserve Bank of St. Louis
William.R.Emmons@stls.frb.org

These comments do not necessarily represent the views of the Federal Reserve Bank of St. Louis or the Federal Reserve System.
**Generations X and Y: Facing Economic and Financial Challenges in the Shadow of the Baby Boom**

- Why generations matter for economic and financial outcomes
- Who are Generations X and Y?
- Opportunities for Gen X and Gen Y
  - Labor markets: You’ll benefit from scarce competition.
  - Asset markets: We need you to buy our houses and stocks.
- Economic and financial challenges facing the members of Gen X and Gen Y
  - Damage from the Great Recession
  - Can living standards keep rising?
  - Fiscal and environmental sustainability
Why Generations Matter for Economic and Financial Outcomes

- Think of generations as cohorts (groups) that move through their lives side-by-side—your peer group.

- New generations affect overall supply and demand.
  - A large supply of workers may push down wages; a large number of savers may push down interest rates.
  - A large demand for education, employment, housing, or social insurance will affect political choices.

- Each generation is unique, shaped by social, cultural, and political experiences.
  - Historical episodes affect attitudes and behaviors.
  - Each generation will have its turn in charge of the economy and the political process.
Generations Since 1900

- The “Greatest Generation,” born 1900-24 (included people who fought in WW II)
- The “Silent Generation,” born 1925-45 (Depression and WW II)
- “Baby Boomers,” born 1946-64
- “Generation X,” born 1965-80
- “Generation Y” (also called “Millennials” or “Echo Boomers”), born 1981-2000
- The “Post-Millennial Generation,” born after 2000

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers

Currently
90-114 years old
69-89
50-68
34-49
14-33
Under 14

Big winners
Big losers
Generations Since 1900: How Big?

Size of Generations Since 1900 With Projections Through 2050

Source: Census Bureau
Generations Since 1900: How Big?

Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45

Source: Census Bureau
Generations Since 1900: How Big?

Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64

Source: Census Bureau
Generations Since 1900: How Big?

Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Source: Census Bureau
Generations Since 1900: How Big?

Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Source: Census Bureau
Generations Since 1900: How Big?

Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80
- Post-Millennials: 2001-13

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths

Average Annual Size of Generations Since 1900 With Projections Through 2050

Millions of people

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths

Average Annual Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45

Millions of people

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths

Average Annual Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths

Average Annual Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Millions of people

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths

**Average Annual Size of Generations Since 1900 With Projections Through 2050**

- **Greatest Generation:** 1900-24
- **Silent Generation:** 1925-45
- **Baby Boomers:** 1946-64
- **Generation X:** 1965-80
- **Generation Y:** 1981-2000

**Source:** Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths

Average Annual Size of Generations Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80
- Post-Millennials: 2001-13

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths and Growing Overall Population

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths and Growing Overall Population

Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths and Growing Overall Population

Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths and Growing Overall Population

Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Percent of overall population

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths and Growing Overall Population

Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Source: Census Bureau
Generations Since 1900: Adjusting for Different Generation Lengths and Growing Overall Population

Source: Census Bureau

Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80
- Post-Millennials: 2001-13

Percent of overall population

Source: Census Bureau
Life-Cycle Stages: Which Generation Had the Largest School-Age Population?

School-Age Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

First year of cohort: 1900

Greatest Generation: 1900-24

Source: Census Bureau
Life-Cycle Stages: Which Generation Had the Largest School-Age Population?

Source: Census Bureau

![Graph showing the school-age share of population for different generations. The graph compares the Greatest Generation (1900-24) and the Silent Generation (1925-45). The y-axis represents the percent of the overall population, and the x-axis shows the age of the first year's members of the generation. The graph indicates that the Greatest Generation had the largest school-age population.](image-url)
Life-Cycle Stages: Which Generation Had the Largest School-Age Population?

Source: Census Bureau
Life-Cycle Stages: Which Generation Had the Largest School-Age Population?

Source: Census Bureau

School-Age Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Percent of overall population

Age of the first year's members of the generation
Life-Cycle Stages: Which Generation Had the Largest School-Age Population?

Source: Census Bureau

![Graph showing school-age share of population for different generations.](image-url)
Life-Cycle Stages: Which Generation Had the Largest School-Age Population?

Source: Census Bureau

---

**School-Age Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050**

- **Greatest Generation:** 1900-24
- **Silent Generation:** 1925-45
- **Baby Boomers:** 1946-64
- **Generation X:** 1965-80
- **Generation Y:** 1981-2000
- **Post-Millennials:** 2001-13

---

Source: Census Bureau
Life-Cycle Stages: Which Generation Had the Largest Working-Age Population?

Source: Census Bureau
Generations X and Y and Post-Millennials Will Be in Scarce Supply

Percent of overall population

Working-Age Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Baby Boomers: 1946-64
- Generation X: 1965-80
- Post-Millennials: 2001-13

Source: Census Bureau
Supply and Demand in the Labor Market

Price = wage rate

Supply of workers

Demand for workers

Quantity = hours worked
Silent Generation Was Very Small, Baby Boom Was Very Large
Silent Generation Was A Small Group

=> Higher Wages

Price = wage rate

W'

Supply of workers

Demand for workers

Quantity = hours worked

H'
Baby Boomers Were A Large Group
=> Lower Wages

Price = wage rate

Supply of workers

Demand for workers

Quantity = hours worked
Members of the Silent Generation Received Highest Incomes, Controlling for Edcn. etc.

Members of the Silent Generation Are Wealthiest, Controlling for Edcn. etc.

Life-Cycle Stages: Which Generation Had the Largest Retirement-Age Population?

Source: Census Bureau

Graph: Retirement-Age Share of Population of the Average Annual Generation Size Since 1900 With Projections Through 2050

- Greatest Generation: 1900-24
- Silent Generation: 1925-45
- Baby Boomers: 1946-64
- Generation X: 1965-80

Percent of overall population

Source: Census Bureau
Supply and Demand in the Market for Retirement Assets

Price = stock and bond valuation (inverse of expected return)

Supply of retirement assets

Demand for retirement assets

Quantity = financial assets
Baby Boomers Save for Retirement

=> Expected Returns Decline

Price = stock and bond valuation (inverse of expected return)
Baby Boomers Sell Assets $\implies$ Valuations Decline

Price = stock and bond valuation (inverse of expected return)

Supply of retirement assets

Demand for retirement assets

Quantity = financial assets
Baby Boomers Saved While Stocks Were Expensive; Retiring With Lower Valuation

Cyclically Adjusted S&P Price-to-Earnings Ratio

Stock price divided by 10-year moving average of real earnings per share

Source: Robert Shiller / Haver Analytics

Quarterly through Q4.2013
High Real Interest Rates Helped Silent Generation Save for Retirement

Real 10-Year Treasury Yield

Percent

Greatest Generation saving
Silent Generation saving
Baby Boomers saving
Gen X saving
Greatest Generation retiring
Silent Generation retiring
Baby Boomers retiring

Source: Haver Analytics
Quarterly through Q4.2013
Slow Growth of Prime-Age Homeowners Will Dampen Housing Market for Years

Millions

Annual change in number of housing units
Gen X becoming homeowners
Gen Y becoming homeowners
Baby Boomers retiring and selling houses

Growth of Households Between 35 and 64 vs. Growth in Number of Housing Units
Economic and Financial Challenges Facing Members of Generations X and Y

- Damage from the housing crash and Great Recession—especially for Gen X.
- Can economic growth and rising living standards continue at earlier rates?
- Long-term sustainability of current policies
  - Environmental
  - Fiscal
Average Wealth of Young Families Plunged During Recession; Recovering Slowly

Index levels equal 100 in 1989

Homeownership Rates Are Plunging Among the Non-Elderly

Source: Census Bureau
Annual through 2013
The Workforce Will Grow Slowly, Reducing GDP Growth Potential

Annual Change in Number of People Aged 20-64

Source: Census Bureau     Annual through 2013
The Fiscal Deck Is Stacked Against Gen X and Especially Gen Y

<table>
<thead>
<tr>
<th>Year of birth</th>
<th>Generation</th>
<th>Average per-capita lifetime net benefit from federal benefits received minus taxes paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1923</td>
<td>Greatest</td>
<td>$105,900</td>
</tr>
<tr>
<td>1933</td>
<td>Silent</td>
<td>$191,100</td>
</tr>
<tr>
<td>1943</td>
<td>Silent</td>
<td>$279,300</td>
</tr>
<tr>
<td>1953</td>
<td>Baby Boom</td>
<td>$222,700</td>
</tr>
<tr>
<td>1963</td>
<td>Baby Boom</td>
<td>$54,200</td>
</tr>
<tr>
<td>1973</td>
<td>Gen X</td>
<td>-$75,250</td>
</tr>
<tr>
<td>1983</td>
<td>Gen Y</td>
<td>-$160,150</td>
</tr>
<tr>
<td>1993</td>
<td>Gen Y</td>
<td>-$183,400</td>
</tr>
<tr>
<td>2003</td>
<td>Post-Millennial</td>
<td>-$135,100</td>
</tr>
<tr>
<td>2013</td>
<td>Post-Millennial</td>
<td>-$86,900</td>
</tr>
</tbody>
</table>

The Cost of Doing Nothing About the Environment

- Without action, the overall costs of climate change will be equivalent to losing at least 5% of global gross domestic product (GDP) each year, now and forever.

- Including a wider range of risks and impacts could increase this to 20% of GDP or more, also indefinitely.

- Source: *The Stern Review of the Economics of Climate Change*, 2006 (www.webcitation.org/5nCeyEYJr)
Generations X and Y: Facing Economic and Financial Challenges in the Shadow of the Baby Boom

- The Baby-Boom generation suffered from its large size, but has passed some of the adjustment costs to future generations.
  - Housing-market adjustments
  - Fiscal- and environmental-sustainability challenges
- Generation X suffered most from the housing crash.
- Gen X and especially Gen Y are big fiscal losers.
- Generations X, Y, and the Post-Millennials (in that order) are likely to benefit in labor and asset markets from their smaller size.
Center for Household Financial Stability

A research and policy initiative of the Federal Reserve Bank of St. Louis:  [www.stlouisfed.org/hfs](http://www.stlouisfed.org/hfs).

Some of our specific research questions:

- Which families suffered the most during the financial crisis?
- Why are only some families recovering from the crisis?
- What household balance-sheet characteristics are associated with financial instability?
To Learn More About the Financial Outlook for Young American Families

- Upcoming public events:

    - Topic: The Balance Sheets of Younger Americans—Is the American Dream at Risk?
    - Sessions on student loans, homeownership, economic mobility, economic impacts of young families, and more.

  - October 16-17, 2014: Policy Symposium in Washington DC.
    - In partnership with the New America Foundation and the Young Invincibles (an advocacy group for young Americans).

- Find our research, public presentations, and media coverage at www.stlouisfed.org/hfs.