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From 2014 to 2015, Real Median Household Income Increased by $2,800 (or 5.2 Percent), Fastest Annual Growth on Record

Change in Real Median Household Income, 1968-2015

Percent Change from Prior Year

2015: +5.2 Percent

Source: Census Bureau; CEA calculations.
Income Increased for Households Across Distribution, With Largest Gains at Bottom and Middle

**Growth in Real Household Income by Percentile, 2014-2015**

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th</td>
<td>7.9</td>
</tr>
<tr>
<td>20th</td>
<td>6.3</td>
</tr>
<tr>
<td>40th</td>
<td>5.5</td>
</tr>
<tr>
<td>50th</td>
<td>5.2</td>
</tr>
<tr>
<td>Median</td>
<td>5.4</td>
</tr>
<tr>
<td>80th</td>
<td>4.1</td>
</tr>
<tr>
<td>90th</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: Census Bureau; CEA calculations.
Middle-Class Income Growth Has Slowed in Recent Decades

### Annual Real Middle-Class Income Growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Family Income</td>
<td>3.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td><em>(Census Bureau)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income with Benefits</td>
<td>N/A</td>
<td>0.5%</td>
</tr>
<tr>
<td><em>(CBO, adj. for household size)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income with Gov't Transfers/Taxes</td>
<td>N/A</td>
<td>1.0%</td>
</tr>
<tr>
<td><em>(CBO, adj. for household size)</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Income levels from the Census Bureau are deflated with the CPI-U-RS price index, and income levels from the Congressional Budget Office (CBO) are deflated with the personal consumption expenditures price index. CBO median income is extended before 1979 and after 2013 with the growth rate of Census median household income. Source: World Wealth and Income Database; Census Bureau; Congressional Budget Office; CEA calculations.
Drivers of Income Growth: Productivity, Inequality, and Participation

Determinants of Middle-Class Income Growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Productivity Growth (Annual Average)</td>
<td>2.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Income Shares</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top 1 Percent</td>
<td>11% → 8%</td>
<td>8% → 18%</td>
</tr>
<tr>
<td>Bottom 90 Percent</td>
<td>66% → 68%</td>
<td>68% → 52%</td>
</tr>
<tr>
<td>Labor Force Participation Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men, 16 and Older</td>
<td>87% → 79%</td>
<td>79% → 69%</td>
</tr>
<tr>
<td>Women, 16 and Older</td>
<td>33% → 45%</td>
<td>45% → 57%</td>
</tr>
</tbody>
</table>

Some Thought Experiments

<table>
<thead>
<tr>
<th>Thought Experiment</th>
<th>Factor</th>
<th>Base Period</th>
<th>Percentage Impact on 2015 Average Income</th>
<th>Income Gain to 2015 Typical Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>Total Factor Productivity Growth</td>
<td>1948-1973</td>
<td>65%</td>
<td>$37,000</td>
</tr>
<tr>
<td>Inequality</td>
<td>Share of Income Earned by Middle 20%</td>
<td>1973</td>
<td>19%</td>
<td>$10,000</td>
</tr>
<tr>
<td>Participation</td>
<td>Female Labor Force Participation Rate</td>
<td>1948-1995</td>
<td>6%</td>
<td>$4,000</td>
</tr>
<tr>
<td>Combined Impact</td>
<td>All of the Above</td>
<td></td>
<td>108%</td>
<td>$61,000</td>
</tr>
</tbody>
</table>

Note: These thought experiments are intended to demonstrate the importance of these three factors for middle-class incomes. They do not consider second-order effects or interactive effects. The first thought experiment assumes that an increase in productivity is associated with an equal increase in the Census Bureau’s mean household income. The second thought experiment uses the Census Bureau’s mean income of the middle quintile as a proxy for median income. The third thought experiment assumes that newly-participating women will have the same average earnings as today’s working women. The first and third thought experiments assume that income gains are distributed proportionally such that mean and median incomes grow at the same rate. Dollar gains are calculated off a base of the Census Bureau’s median household income in 2013. The fourth thought experiment compounds the effects of the first three.

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Average Annual Productivity Growth Has Slowed in All of the G-7 Economies

Source: Conference Board, Total Economy Database; CEA calculations.

Labor Productivity Growth, G-7 Countries

Source: Conference Board, Total Economy Database; CEA calculations.
Largest Contributor to Recent Low Productivity Growth: Declining Capital Intensity per Worker

Inadequate Demand Has Contributed to a Shortfall in Investment

Decomposition of the Investment Slowdown, 2008-2014

Average Percent Deviation from IMF Spring 2007 Forecasts

Note: The figure shows the deviation of investment between 2008 and 2014 from forecasts made in the spring of 2007. Black diamonds indicate the average percent deviation of total investment. Colored segments show the contribution of the components of investment—business, residential, and public—to the deviation. Public-sector contributions to residential and nonresidential investment are excluded from these categories when data for these contributions are available. Peripheral Euro Area category includes Greece, Ireland, Italy, Portugal, and Spain. Core Euro Area category includes Austria, Estonia, Finland, France, Germany, Latvia, Luxembourg, Malta, the Netherlands, Slovakia, and Slovenia. Source: International Monetary Fund, Fiscal Monitor Database; Consensus Economics; national sources via Haver Analytics.
Demography Boosted Productivity Growth from 1985 to 2005 and Has Been a Headwind Since, But Should Level Out in Coming Decades

Over the Last 35+ Years, Firm Exit Has Remained Relatively Steady
But the Firm Entry Rate Has Decreased Substantially

Firm Dynamism, 1977-2013

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The United States Has Seen Faster Growth and Higher Levels of Income Inequality Than Other Major Advanced Economies

Source: World Wealth and Income Database.
Competitive Explanation: Increased Demand for Skills

College Earnings Premium, 1975-2015

Note: Ratio of median annual earnings of full-time, full-year workers over age 25 with a bachelor’s degree only to median annual earnings of full-time, full-year workers over age 25 with a high school degree only. Prior to 1992, bachelor’s degree is defined as four years of college.

Competitive Explanation: Slowdown in the Growth of the Supply of Skills

Mean Years of Schooling at Age 30, U.S. Native-Born, by Year of Birth, 1876-1982

Mean Years of Schooling Completed

Year of Birth

1876-1951 Trend

1951-1982 Trend

Source: Calculations by Claudia Goldin and Lawrence Katz.
Noncompetitive Explanation: Worker Bargaining Power Has Been Reduced

Union Membership as a Share of Total Employment and Bottom 90 Percent Income Share, 1915-2015


Note: Total employment from 1901 to 1947 is derived from estimates in Weir (1992). For 1948 to 2015, employment data are annual averages from the monthly Current Population Survey.

Minimum wage adjusted for inflation using the CPI-U-RS.


Percent


54 56 58 60 62 64 66 68

Notes: Shading denotes recession.
Noncompetitive Explanation: Increasing Dispersion in Returns to Invested Capital Across Firms

Return on Invested Capital Excluding Goodwill, U.S. Publicly-Traded Nonfinancial Firms

Note: The return on invested capital definition is based on Koller, Goedhart, and Wessels (2015), and the data presented here are updated and augmented versions of the figures presented in Chapter 6 of that volume. The McKinsey data includes McKinsey analysis of Standard & Poor’s data and exclude financial firms from the analysis because of the practical complexities of computing returns on invested capital for such firms.
Noncompetitive Explanation: Increasing Wage Inequality Across, But Not Within, Firms

Note: Only firms and individuals in firms with at least 20 employees are included. Only full-time individuals aged 20 to 60 are included in all statistics, where full-time is defined as earning the equivalent of minimum wage for 40 hours per week in 13 weeks. Individuals and firms in public administration or educational services are not included. Firm statistics are based on the average of mean log earnings at the firms for individuals in that percentile of earnings in each year. Data on individuals/their firms are based on individual log earnings minus firm mean log earnings for individuals in that percentile of earnings in each year. All values are adjusted for inflation using the PCE price index.

Source: Song et al. (2016).
Labor Market Dynamism Has Been Declining for Decades


Rate (Percent)

Labor Market Dynamism, 1977-2013

Job Creation

Job Destruction

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The Labor Force Participation Rate Peaked in 2000 and Has Declined Since (Though Has Been Stable Since 2013:Q4)

Labor Force Participation Rate, 1948-2016

Note: Shading denotes recession.
A Troubling Trend: Declining Prime-Age Labor Force Participation

Prime-Age Male Labor Force Participation Rate

Prime-Age Female Labor Force Participation Rate

Declining Prime-Age Male Participation Has Been Concentrated Among Men with Less Educational Attainment

Prime-Age Male Labor Force Participation Rate by Educational Attainment, 1964-2016

Despite Flexible Labor Markets, the United States Ranks Towards the Bottom of the OECD in the Share of Prime-Age Men and Women in the Labor Force

Source: Organisation for Economic Co-operation and Development.
## OECD Going for Growth Indicators

<table>
<thead>
<tr>
<th>Measures of Labor Market Flexibility</th>
<th>Percentile Rank (100 = Most Flexible/Most Supportive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Labor Market Regulation (2014)</td>
<td>100</td>
</tr>
<tr>
<td>Employment Protection for Regular Employment (2013)</td>
<td>100</td>
</tr>
<tr>
<td>Minimum Cost of Labor (2014)</td>
<td>96</td>
</tr>
<tr>
<td>Coverage of Collective Bargaining Agreements (2013)</td>
<td>94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures of Institutional Labor Market Support</th>
<th>Percentile Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure on Active Labor Market Policies per Unemployed (2013)</td>
<td>6</td>
</tr>
<tr>
<td>Net Childcare Costs, Couples (2012)</td>
<td>10</td>
</tr>
<tr>
<td>Implicit Tax on Returning to Work, Second Earner (2012)</td>
<td>10</td>
</tr>
</tbody>
</table>

Selected Policies for Faster Productivity Growth

- Investing in infrastructure and research
- Promoting innovation via trade
  - Passing the Trans-Pacific Partnership (TPP)
- Reforming the business tax code to reduce distortions
- Promoting high-skilled immigration
Some Policies to Address Inequality

• **Promoting equality of opportunity**
  • Investing in high-quality early learning and preschool programs
  • Investing in higher education, job training, and apprenticeship programs
  • Income support for low-income households

• **Reducing concentration of market power and rent-seeking behavior**
  • Raising the minimum wage
  • Supporting collective bargaining and other forms of worker voice
  • Carefully administering existing regulations that fight rent-seeking
  • Reforming patent rules
  • Making wireless spectrum more broadly available
  • Reforming occupational licensing and land-use restrictions
Some Policies to Increase Labor Force Participation

• Expanding aggregate demand

• Investing in education

• Reforming occupational licensing

• Deepening “connective tissue” in labor markets
  • Job-search assistance as part of unemployment insurance system
  • Wage insurance

• Greater access to child care and paid leave for working families

• Criminal justice reform

• Comprehensive immigration reform
Some Policies to Increase Resilience and Sustainability

• Continuing to implement Wall Street Reform

• Improving automatic stabilizers and making more active use of fiscal policy

• Reducing the long-run deficit with a combination of reforms to entitlements and increased revenue

• Addressing climate change
Inclusive Growth: The Role of Productivity, Inequality, and Participation

Jason Furman
Chairman, Council of Economic Advisers

NYU Stern Center for Global Economy and Business
New York, NY
October 17, 2016