A FAQ on tech, jobs, and wages

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What’s going on?
What’s going on?

The polarization or “hollowing out” of the workforce
All US jobs in 1979

Lowest paid  Middle Class  Highest paid

Skill Percentile (ranked by occupation's 1979 mean log wage)
Smoothed Employment Changes, 1979-1989

“Market Share” of these jobs increased

“Market Share” of these jobs declined
Smoothed Employment Changes, 1989-1999

Skill Percentile (ranked by occupation's 1979 mean log wage)
Is this a US-only phenomenon?
Is this a US-only phenomenon?

No
Change in Occupational Employment Shares in Low, Middle, and High-Wage Occupations in 16 EU Countries, 1993–2010

Source: Goos, Manning, and Salomons (2014, table 2).
Isn’t this mainly because of globalization / China?
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No

Source: Federal Reserve Bank of St. Louis, Bureau of Economic Analysis

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So what *is* the cause?
So what *is* the cause?

*Automation of routine work*
“The adoption of computers substitutes for... workers performing routine tasks—such as bookkeeping, clerical work, and repetitive production and monitoring activities—which are readily computerized because they follow precise, well-defined procedures.”

- Autor and Dorn, 2013
“We evaluate numerous alternative explanations for the pronounced differences in wage and employment polarization... including deindustrialization, offshoring, ... and growing low-skill immigration. None of these alternatives appears central to our findings.”

- Autor and Dorn, 2013
Then why isn’t there mass unemployment?
Then why isn’t there mass unemployment?

*Economic growth + Labor force flexibility + + “downward mobility”*
US Real GDP per Capita and Employment, 1947-2015

<table>
<thead>
<tr>
<th>OECD Measures of Labor Market Flexibility</th>
<th>U.S. Percentile Rank (100 = Most Flexible)</th>
</tr>
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<tbody>
<tr>
<td>Barriers to Entrepreneurship</td>
<td>62</td>
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<tr>
<td>Labor Taxation</td>
<td>71</td>
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<tr>
<td>Coverage of Collective Bargaining Agreements</td>
<td>90</td>
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<tr>
<td>Minimum Cost of Labor</td>
<td>92</td>
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<tr>
<td>Scope of State Intervention</td>
<td>94</td>
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<tr>
<td>Employment Protection for Regular Employment</td>
<td>100</td>
</tr>
<tr>
<td>Overall Labor Market Regulation</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: OECD 2015; CEA calculations.
Smoothed Employment Changes, 2007-2012

Employment moves from here to here.

Employment moves from here...
US Real GDP per Capita, Employment and Median Family Income, 1947-2015

Then why isn’t there mass unemployment?

Also, there is concentrated high unemployment
Figure 1: Prime-Age Male Labor Force Participation Rate

Figure 9: Prime-Age Male Labor Force Participation by Educational Attainment

What are the consequences?
What are the consequences?

Hard to say, precisely. Here are a few other things that are going on...
Mortality


Note: Mortality data are for all-cause mortality. Figure is adapted from Case and Deaton (2015) figure 1.
Social Decay

FIGURE 8.5. DIVORCE
Social Decay

FIGURE 8.11. PERCENTAGE OF CHILDREN LIVING WITH BOTH BIOLOGICAL PARENTS WHEN THE MOTHER WAS AGE 40
Social Decay

FIGURE 10.2. WHITE PRISONERS
“The Politics of Resentment”
McAfee's caution:

"If current trends continue, the people will rise up before the machines do."
Are things going to get better?
Are things going to get better?

Two views here:
1) YES. We’re underestimating the power of capitalism. History will repeat itself.
Are things going to get better?

Two views here:
2) NO. We’re underestimating the power of modern technology. This time is different.
What should we do?
What should we do?

*Depends on who you talk to.*
Thank you!

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