WELCOME TO EOS 2020

FINDING GOOD WORKERS

NEW CHALLENGES, NEW SOLUTIONS

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Bureau of Business and Economic Research
University of Montana

45TH ANNUAL ECONOMIC OUTLOOK SEMINAR
Finding Good Workers: A Good Problem?

- Tight labor markets are pushing up wages, good for workers
- Low unemployment has always been the goal of economic policy
- Wage pressures from tight labor markets have yet to show up in inflation
- There are “bad jobs” as well as “good workers”
- “The market will fix it”
- Unemployment rates are an inadequate measure of labor market health
- Tight markets reveal daunting challenges producing workers with the right skills
- Some solutions are better than others
- Solutions that tap into under-utilized resources and/or match skill with jobs better are especially attractive
Less Than One Unemployed Worker for Every Job Opening in the U.S. Economy Today

Source: U.S. Bureau of Economic Analysis
Unemployment Rates, Nov 2019

Source: Montana Department of Labor and Industry

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF MONTANA
Number of Unfilled Positions Has Doubled in the Last 8 Years

Total Unfilled Job Vacancies, U.S., Millions

7.3 Million Unfilled Jobs

Source: OECD
Finding Good Workers

Why?

1. Demographics
2. Skill Mismatch
3. Generational Change
4. Everything Else
The Broad Footprint of Demographic Change

- Economic Growth
- Inflation
- Asset Returns
- Real Estate
- Public and Private Pensions
- Oh yes … the labor market!

Growth in Older Population Shares
Montana Population Tree

Year: 2011

Finding Good Workers
Finding Good Workers

Year: 2021

Montana Population Tree

Montana Population Tree

66
Working Age Population Set to Expand in the U.S.

Growth in Working Age Population (20-64), Percent

Source: Census Bureau, United Nations, Morgan Stanley Research
# Total Population, Share of 80+ and 60+ Groups

<table>
<thead>
<tr>
<th></th>
<th>Total Population (millions)</th>
<th>Population Growth (%p.a.)</th>
<th>Share of 80+ (%)</th>
<th>Share of 60+ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>7,550</td>
<td>1.4</td>
<td>0.9</td>
<td>1.8</td>
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<tr>
<td>France</td>
<td>65</td>
<td>0.5</td>
<td>3.2</td>
<td>6.2</td>
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<tr>
<td>Germany</td>
<td>82</td>
<td>0.2</td>
<td>3.2</td>
<td>6.3</td>
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<tr>
<td>Italy</td>
<td>59</td>
<td>0.1</td>
<td>2.6</td>
<td>7.1</td>
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<tr>
<td>Japan</td>
<td>127</td>
<td>0.1</td>
<td>1.7</td>
<td>8.1</td>
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<tr>
<td>United Kingdom</td>
<td>66</td>
<td>0.5</td>
<td>3.1</td>
<td>5.1</td>
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<tr>
<td>United States</td>
<td>324</td>
<td>0.9</td>
<td>2.6</td>
<td>3.8</td>
</tr>
</tbody>
</table>
Labor force participation rates of White men 25 to 54 years old by education, annual averages

More Challenges in the Pipeline?

- Gen Z (born 1996-2010) value job satisfaction, college education, flexible hours more than Millennials.
- Half of the most popular jobs they looked at on Indeed are tech jobs (right).
- 3 percent say they want a job in the construction trades (NAHB survey).
- 63 percent of those undecided about careers would not consider construction trades even if pay were above $100,000.

Most Popular Jobs of the Next Generation

<table>
<thead>
<tr>
<th>Job</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>iOS developer</td>
<td>0</td>
</tr>
<tr>
<td>Computer vision engineer</td>
<td>1</td>
</tr>
<tr>
<td>Machine learning…</td>
<td>2</td>
</tr>
<tr>
<td>Audio engineer</td>
<td>3</td>
</tr>
<tr>
<td>Daycare assistant</td>
<td>4</td>
</tr>
<tr>
<td>Beauty consultant</td>
<td></td>
</tr>
<tr>
<td>Junior software engineer</td>
<td></td>
</tr>
<tr>
<td>Bridal consultant</td>
<td></td>
</tr>
<tr>
<td>Photojournalist</td>
<td></td>
</tr>
<tr>
<td>Bookseller</td>
<td></td>
</tr>
<tr>
<td>Anesthesiologist</td>
<td></td>
</tr>
<tr>
<td>Game master</td>
<td></td>
</tr>
<tr>
<td>Entry level developer</td>
<td></td>
</tr>
<tr>
<td>Veterinary assistant</td>
<td></td>
</tr>
<tr>
<td>Associate dentist</td>
<td></td>
</tr>
</tbody>
</table>

Source: Indeed.com
Wages Are Accelerating, Especially for the Lowest Paid Workers

Source: Federal Reserve Bank of Atlanta
Non-California West Continues to Attract New Migrants

Net Domestic Migration by State, 2019

- More than 0.5%
  - +25,821 (0.6%)
  - +27,360 (1.5%)
  - +43,207 (1.4%)
  - +15,588 (0.5%)
  - +91,017 (1.3%)

- 0.1% - 0.5%
  - +6,024 (0.6%)
  - +43,207 (1.4%)

- -0.2% - 0.1%
  - -203,414 (-0.5%)

- Less than -0.2%
  - -0.5%
The Market is Working: Strong Hiring is Drawing More Workers Into the Labor Market
International Migration is Lower than in the 1990s

Source: U.S. Census Bureau
More than 0.17%
0.1% - 0.17%
0.065% - 0.1%
Less than 0.065%

Border and Urban States Attract Foreign Migrants

Net International Migration by State, 2019

+24,103
+322
+74,028
+65,044
## Retirement Ages: Effective and Official

<table>
<thead>
<tr>
<th>Retirement Age (Years)</th>
<th>Men</th>
<th>Women</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Effective</td>
<td>Official</td>
<td>Effective</td>
</tr>
<tr>
<td>Korea</td>
<td>72.0</td>
<td>61.0</td>
<td>72.2</td>
<td>61.0</td>
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<tr>
<td>Mexico</td>
<td>71.6</td>
<td>65.0</td>
<td>67.5</td>
<td>65.0</td>
</tr>
<tr>
<td>Turkey</td>
<td>66.1</td>
<td>60.0</td>
<td>66.3</td>
<td>58.0</td>
</tr>
<tr>
<td>Japan</td>
<td>70.2</td>
<td>65.0</td>
<td>68.8</td>
<td>65.0</td>
</tr>
<tr>
<td>New Zealand</td>
<td>68.4</td>
<td>65.0</td>
<td>66.4</td>
<td>65.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>66.0</td>
<td>65.0</td>
<td>64.3</td>
<td>64.0</td>
</tr>
<tr>
<td>United States</td>
<td>66.8</td>
<td>66.0</td>
<td>65.4</td>
<td>66.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>64.6</td>
<td>65.0</td>
<td>63.2</td>
<td>63.0</td>
</tr>
<tr>
<td>Italy</td>
<td>62.1</td>
<td>66.6</td>
<td>61.3</td>
<td>65.6</td>
</tr>
<tr>
<td>Netherlands</td>
<td>63.5</td>
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<tr>
<td>France</td>
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<td>Germany</td>
<td>63.3</td>
<td>65.0</td>
<td>63.2</td>
<td>65.0</td>
</tr>
</tbody>
</table>

Source: OECD. Red numbers indicate effective is greater than official.
Finding Good Workers

Information Technology Jobs Skew Young

Workforce by age, U.S., 2019

Source: Wall Street Journal
What Companies Can Do

• **Pay people more.** This is already happening. Does it grow the total workforce?
• **Search more broadly.** Relax requirements. Look at non-traditional workers. Look outside local area, especially if remote work is feasible.
• **Invest more in training.** Hiring less qualified workers requires more training to bring them up to acceptable skill levels, even if there is a risk they will leave and take work elsewhere.
• **Reconfigure job roles.** Find ways to make existing staff more productive to cover needed functions with existing workers.
• **Recruit future workers.** Connect with middle school-aged people to raise awareness of career opportunities.
• **Automation and outsourcing.**
• **Turning down work.**
What Policymakers Can Do
(But maybe not if they want to get re-elected)

• **Boost retirement age.** Social Security and Medicare need this change eventually anyway.
• **Increase female labor force participation.** More flexibility and a big expansion in child care availability is needed.
• **Fix immigration policy.** Has always been a U.S. strength.
• **Raise teenage participation.** Compatible with college prep?
• **Re-think drug testing policies.** This is quietly happening already.
• **Reconsider occupation licensing requirements.** These make it harder for two-earner couples to migrate to job opportunities.
• **Explore employment of incarcerated population.**