

# How workforce science can help workers (and firms, too!)

## Problems Facing Workers Today

### The Labor Share of US GDP is Decreasing

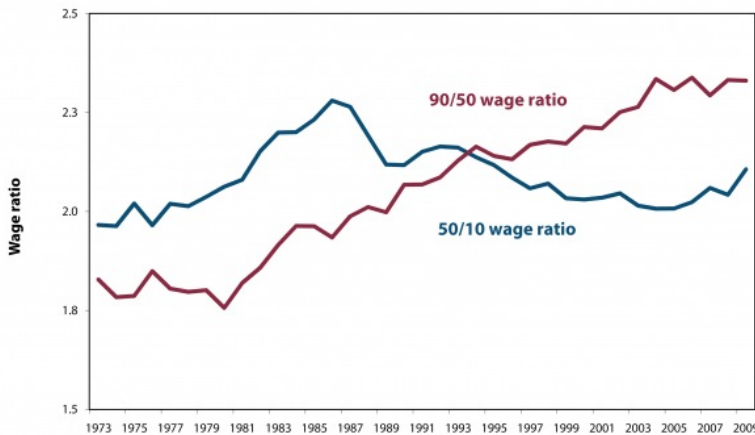
Workers receive a decreasing share of the value added produced in the US, while capital receives an increasing share (see Fig 1.).



Figure 1 Labor share of US GDP

The declining labor share affects mainly middle and low wage workers. Fig 2 shows that median wages have decreased compared to top wages, with little change in the relationship between the wages of median and low income workers.

### Men's wage inequality



Ratio of percentiles of wages at various parts of the income distribution

Figure 2 Wage inequality

Source: Economic Policy Institute. 2011. "Upper Tail" inequality growing steadily: Men's wage inequality, 1973-2009. Washington, D.C.: Economic Policy Institute. May 11, 2011. <<http://www.stateofworkingamerica.org/charts/view/192>>.

### Employers are Taking Longer to Fill Jobs.

(Fig 3) Workers are hurt because employment has not kept pace with the post-2008 employment increase in job listings. Firms are hurt because unfilled positions lower productivity.

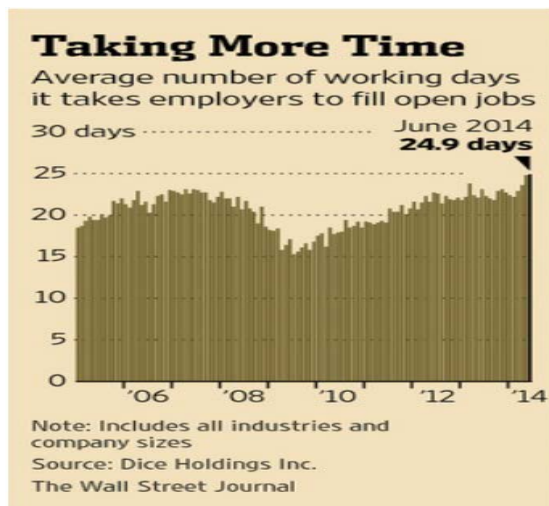


Figure 3 Number of days to fill a position

### The Burden of Labor Market Problems Falls Heavily on Some Groups.

- The long term unemployed are increasingly being shut out of the labor markets (Fig 4).
- Wages and employment rates still lag behind for women, minorities and recent veterans.

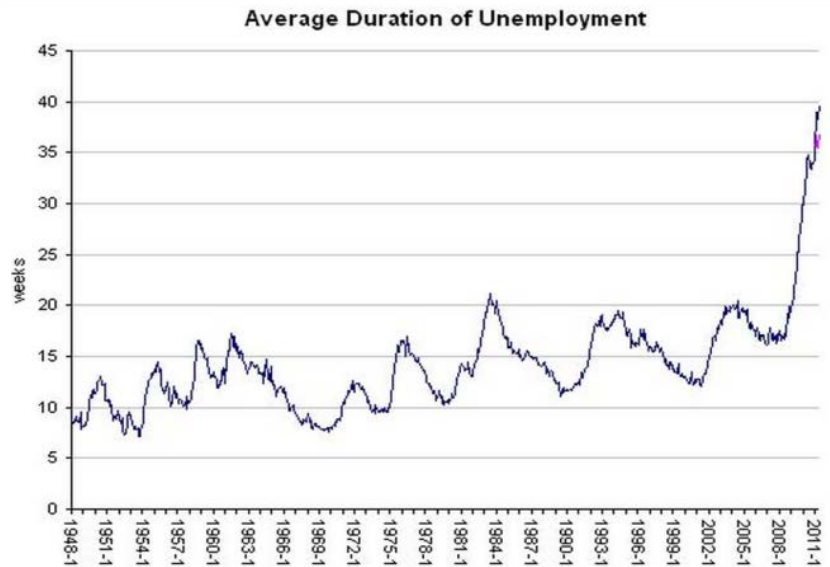


Figure 4 Duration of unemployment spell

Source: Bureau of Labor Statistics Note: Pink line on the right side of the graph shows what the numbers would be if calculated under the Labor Department's older methodology for average unemployment duration.

Can workforce science help ameliorate these problems? We think so. Here are five low-cost ideas that address these problems through a mix of workforce analytics, economic analysis, and a nudge from government.

## Idea 1: Promoting Common Standards for Resumes and Job Listings

The European Union has recently adopted standards for resume uploading into EURES, its job mobility portal.<sup>1</sup> We propose that the US government promote the adoption of the same (or an analogous) standard format for electronic resumes and job listings by firms and government agencies.

### The Current Situation

There are currently no standards for resumes and job listings. When posting jobs online, employers are free to adopt virtually any format they choose, so that applicants have difficulty narrowing down the set of relevant jobs. To receive job applications, each employer either creates its own online form, which is very time-consuming for workers to fill out, or they allow the uploading of entire resumes which are then parsed very imperfectly by automatic programs.

### Benefits of Promoting Common Standards for Resumes and Job Listings

1. **Easier for workers to search for relevant jobs.** With standardized job listing fields for job requirements and duties, workers could more easily determine which jobs they are truly qualified to fill. This improved information would both ensure that workers did not overlook

<sup>1</sup> See <https://ec.europa.eu/eures/main.jsp?catId=27&acro=eures&lang=en#>. These standards have been promulgated by the non-profit hr-xml (now renamed hr open standards, see <http://www.hropenstandards.org/>).

potential matches and reduce the flood of low-relevance applications that are now overwhelming employers.

2. **Easier for workers to apply to jobs.** Once the resume is in a common standard, workers could easily upload it with a few clicks to the websites of any number of firms advertising jobs. Presumably current job sites such as Monster and Indeed would adopt this format for their own resume banks.
3. **Reduce time to fill positions.** If resumes conform to a standard, then their fields become easily searchable by HR officers. This takes away the human error in manually sorting through resumes and reduces the cost of searching for workers. In short, it becomes easier for companies to accurately screen applications.
4. **Bid up workers' wages.** When skills are homogeneous and searchable commodities, firms will compete for them by bidding up the workers' wages. Workers start to become similar to free agents in professional sports.
5. **Creation of transparent marketplaces for skills.** Marketplaces will spring up for matching skills with jobs. Some such marketplaces already exist (Monster, Indeed, etc.), but they are limited by a lack of standardization.
6. **Make the return to skills more transparent.** When skills and unemployment spells are measurable, it will become easier to compile fine-grained, real-time statistics about the return to skills. This will communicate powerful labor market signals upstream to the human capital acquisition process.
7. **Improve OFCCP auditing and EEOC investigations.** At present regulatory agencies have difficulty ascertaining basic facts such as the number of qualified applicants to a job. Requiring audited firms to provide standardized data would improve the quality and lower the cost of audits and investigations. Standardized data would benefit firms as well, since compliant firms could more easily demonstrate their adherence to equal opportunity laws.

### What Government Can Do

1. **Require government offices and federal contractors to post and accept resumes in the standard format.** This will impose minimal burdens, requiring only minor adjustments to their websites. A non-profit organization called Direct Employers currently facilitates OFCCP compliance by corporations, and it could be asked to help with the implementation of standards. The Bureau of Labor Statistics (BLS) might also be asked for advice on the standards.

## Idea 2: Promote Standards for Internal Business Recordkeeping of HR Information

### The Current Situation

Although the most sophisticated forms of workforce science are found in a relatively small group of firms, a wider segment of the business community has expressed growing interest in obtaining metrics dashboards for measuring HR performance and benchmarking it against industry averages. Firms aspire

to measure not only basic contributors to HR performance such as turnover and training but also more advanced and elusive factors such as employee engagement.<sup>2</sup>

Unfortunately, the movement towards dashboards and benchmarking is hampered by the current absence of HR standards, akin to accounting standards, both for keeping raw data and for computing metrics such as investment in training or turnover. HR intermediaries have begun the effort to produce industry benchmarks for firms to evaluate their HR internally. However, no matter how much effort a single firm or service provider invests in HR measurement, no meaningful benchmarks can be devised unless all firms use common data formats and metrics.

Improved metrics are also the building block needed for more sophisticated workforce science, and thus promoting these metrics should be a high priority.

Both in the US and abroad, several non-profit organizations have begun the process of creating HR metrics, including efforts under the auspices of the International Standards Organization. Indeed, non-US efforts are now further advanced, and without some acceleration of our current programs the US may end up having little input into international HR standards for metrics.

### Benefits of Promoting Common HR Metrics Standards

1. **Data:** Provide a data foundation for those workforce science efforts, both private sector and academic, that focus on internal firm issues such as reducing turnover and improving training.
2. **Evidence-based HR:** Encourage better human resources practices based on research rather than on intuition or simply inertia.
3. **Increase workforce investment:** Encourage firms to increase training efforts by enabling the analysis of the gains they create.
4. **Regulatory efforts:** Improve ability of OFCCP and others to evaluate regulatory compliance.

### What Government Can Do

1. **Support private efforts.** Some industry players (a large payroll processing business, for example) have expressed interest in creating and promoting HR data and metrics standards. So far, creating these standards has not resonated with some parts of the business community. The government could openly encourage those industry players who have worked to promote HR data and metrics standards.
2. **Leverage federal contractor rules.** OFCCP could require that audit data be provided in these standardized formats. As IT professionals and accountants get used to thinking in the standardized format in one setting, it will diffuse into other contexts.

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<sup>2</sup> <http://www.bersin.com/News/Details.aspx?id=15395>

## Idea 3: Promote Standards for the Corporate Disclosure of HR Information to the Investment Community

Firms currently disclose very little information about their human capital to investors. What would happen if companies routinely disclosed HR information such as turnover, corporate investment in training, and the time to fill vacancies?

### The Current Situation

Deep-pocket investors care about HR information: private equity funds, for example, research HR information about target companies. However, public firms currently have no HR disclosure obligations and most firms do not disclose such information on their 10-Ks. Capital markets therefore cannot react to and reward investment in human capital by businesses.

In the absence of uniform metrics, even firms that would like to disclose more HR information have difficulty doing so in an illuminating way. Any metrics they released would be hard to interpret, and would risk exposing them to securities law liability for providing misleading information.

### Benefits of Promoting Disclosure of Some Corporate HR Information

1. **Better knowledge.** Researchers in both the investment and academic communities will be able to determine which human capital indicators contribute most to corporate value.
2. **Investors will choose to invest in firms that “get human capital right.”** This allocates capital more efficiently.
3. **Executives will pay more attention to human capital.** For example, if companies feel that they need to disclose turnover, then executives will worry about excessive turnover.
4. **Likely results in greater investment in human capital, higher wages, and better working conditions.**

## Idea 4: Address the “Skills Gap”

### The Current Situation

Employers express frustration that they cannot find skilled workers, a situation they call the “skills gap.” To some extent, the apparent skills gap will be addressed by better matching in the job market and investor pressure to increase human capital investment. However, some workers truly lack the training needed to hold a good job. To address the skills gap, Congress has passed the bipartisan Workforce Innovation and Opportunity Act and the White House has given top priority to improving the quality of job training efforts.

### Benefits of Using Workforce Science

1. **Determine best practices.** Provide insight into the best mechanisms for providing workers with necessary training: who should provide that training (high schools, community colleges,

independent training groups, for-profit or nonprofit) and what form should training take (e.g. general skills or specific skills).

2. **Identify high priority occupations.** Identify the labor market segments with large skill gaps.
3. **Improve credentials.** Examine how certification and credentials should be developed so that employers will reward them, and whether the government should play a role in standardization.

### What Government Can Do

1. **Government training programs.** Use academic workforce science to provide research on the best use of funds allocated under the Workforce Innovation and Opportunity Act.
2. **Labor market research.** The BLS, in concern with academics, should provide research on the occupations with the greatest skill gaps and disseminate this information to students and workers.
3. **Business training.** Encourage businesses to institute internal training programs and rigorously evaluate those programs in collaboration with academia.
4. **Foundation efforts.** Foundations that fund workforce development programs can be encouraged to design those programs in cooperation with academics to ensure that the outcomes can be evaluated and the results shared and used to design future programs.
5. **Certification.** Fund academic research on which credentials and certifications actually result in higher hiring and retention rates.

## Idea 5: Use Workforce Science to Champion Protected Classes and Non-Standard Workers

### The Current Situation

Despite progress, disparities continue in the economic status of groups protected by equal opportunity law such as minorities, women, recent veterans, and workers with disabilities. In addition, many businesses use “common sense” rules of thumb that lead them to shy away from hiring non-standard applicants such as the long-term unemployed and those with a criminal history. While legal, these rules of thumb may not be good predictors of performance.

Workforce science can be helpful in identifying business practices that cost-effectively help protected classes. For example, Google recently examined the causes of the attrition rate among its female workers. Based in this research, it redesigned its family leave policies to improve the retention of new mothers.<sup>3</sup>

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<sup>3</sup>[http://www.slate.com/articles/technology/technology/2013/01/google\\_people\\_operations\\_the\\_secrets\\_of\\_the\\_world\\_s\\_most\\_scientific\\_human.html](http://www.slate.com/articles/technology/technology/2013/01/google_people_operations_the_secrets_of_the_world_s_most_scientific_human.html)

Workforce science can also dispel misconceptions. Recent research from the analytics firm Evolv suggests that non-standard applicants, including both the long term unemployed<sup>4</sup> and those with criminal records,<sup>5</sup> can, if hired, perform quite well.

### Benefits of Applying Workforce Science to Champion Non-Standard Workers

1. **Make the business case for hiring non-standard workers.** Employers have traditionally been encouraged to hire non-standard workers like the unemployed on equal opportunity grounds. A more effective case would show that these workers can also contribute to productivity. Since the case is an analytically difficult one to make, workforce science can be helpful in providing hard evidence for it.
2. **Promote the migration from subjective to productivity-based employee evaluation practices.** The business world has often relied on subjective employee evaluation practices. This subjectivity can disadvantage groups against which prejudices exist. By focusing on productivity, workforce science can shed a healthy dose of disinfectant light on subjective HR practices, and help productivity in the bargain.

### What Government Can Do

1. **Regulatory reform.** At present, companies may be reluctant to assess their own employment practices in case the self-evaluation studies reveal problems. Regulatory agencies, especially the OFCCP and the EEOC, can provide safe-harbor provisions to those companies who want to run self-studies and pilot programs. Such provisions have been tried in the past but were not successful and have recently been rescinded. However, alternative designs might better balance self-policing and government regulation.
2. **Fund research.** Self-studies and pilot programs by businesses could be designed in cooperation with centers of academic excellence, which government should therefore fund.
3. **Study government workforce.** Government could open its own HR practices to self-studies and pilot programs.

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<sup>4</sup> [http://go.evolvondemand.com/HomepageWhiteHouseReport\\_LongTermUnemployment.Blog.LP.html](http://go.evolvondemand.com/HomepageWhiteHouseReport_LongTermUnemployment.Blog.LP.html)

<sup>5</sup> <http://www.economist.com/news/business/21575820-how-software-helps-firms-hire-workers-more-efficiently-robot-recruiters>