



Is Salary Transparency More Than a Trend?

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Economic Research on the Impact of Greater Workplace Transparency

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Overview

How does “salary transparency” affect job seekers and companies? This report explores lessons from recent economic research on how workplace transparency affects labor markets in three key areas:

- *Job Search:* How does company transparency affect the way workers and companies find each other?
- *Pay Negotiation:* How does salary transparency affect the way new employees negotiate over salary and benefits?
- *On-the-Job Performance:* Are employees in more transparent companies more productive? Are they more engaged?

Key Findings

Effects on Job Searching

- Studies find better access to job information can encourage smarter job searching, help improve the quality of job matches, and may lead to shorter unemployment spells for workers.
- Providing more information to job seekers about job application processes improves the diversity of applicant pools by boosting the number of female job applicants.

Impact on Pay Negotiation

- Salary transparency helps expose pay gaps between otherwise similar workers, encouraging underpaid employees to renegotiate or move to better-fitting jobs, improving overall efficiency in labor markets.
- Men are more likely to negotiate salary than women. But studies show this “negotiation gap” disappears when information about other job applicants’ negotiation experience is public information.

On-the-Job Performance

- While the literature on productivity and salary transparency is mixed, most studies find employees are more productive and engaged when pay structures are transparent and predictable.

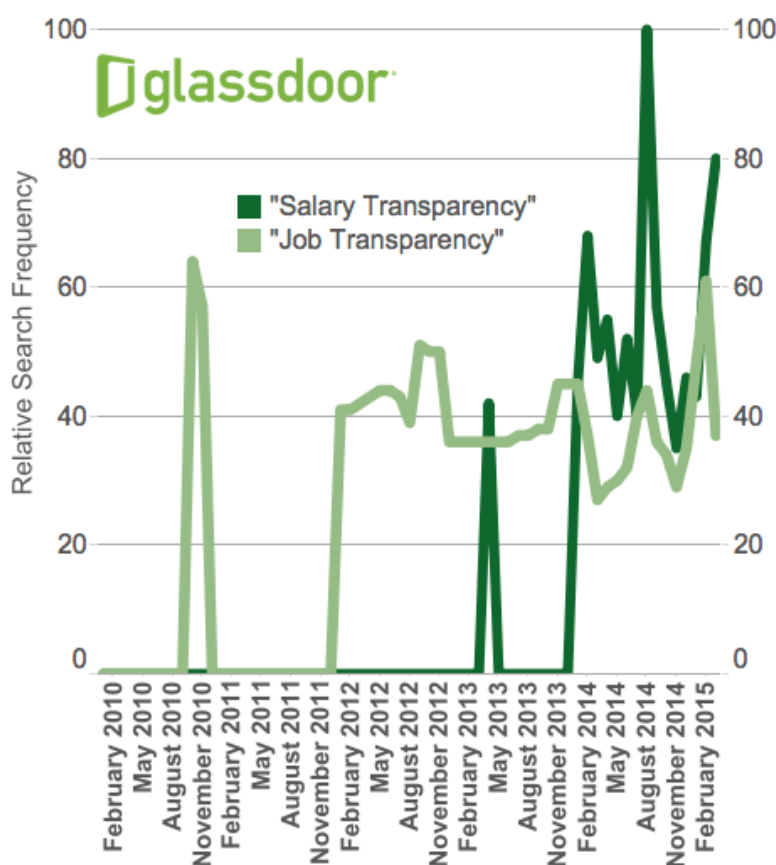
Introduction

Outside of a small number of government and union workplaces, sharing salary information by employees has long been taboo. A 2010 survey by the Institute for Women's Policy Research found that nearly half of all U.S. workers reported being either contractually forbidden or “strongly discouraged” from discussing pay with their colleagues,¹ and similar surveys from Glassdoor have found nearly one-fifth of workers are uncomfortable discussing current compensation with anyone.² These formal and informal “salary secrecy” policies make it hard for employees to learn who is paid what, why, and whether their own pay is fair and consistent with industry standards.

In recent years, there has been a gradual shift away from traditional workplace secrecy and toward more transparent salary policies. One casual indication comes from Google search frequencies. Figure 1 shows relative search interest for “salary” and “job” transparency since January 2010. Popular discussion of workplace transparency is a surprisingly recent phenomenon, with essentially no searches before 2010. Along with growing online job communities in recent years, popular interest in transparency has surged with searches for “salary transparency” growing by roughly 63 percent year-over-year from March 2014 to March 2015.

The rising interest in workplace transparency has caught the attention of researchers in recent

Figure 1. Growing Online Interest in Salary Transparency



Source: Google Trends; Glassdoor Economic Research.

1. See U.S. Department of Labor, Women's Bureau "Fact Sheet" on pay secrecy, available at www.dol.gov/wh/media/pay_secrecy.pdf.

2. "Employees Reveal Increasing Taboos Around Sharing Salary and Compensation Details," Glassdoor Press Release (February 5, 2010). Available online at: www.glassdoor.com/press/.

years.³ There is a growing literature in economics on how transparency in salaries, company culture, work-life balance and other workplace characteristics are having broader effects on today's labor market. This literature offers clues about how pay transparency may affect a variety of economic indicators in the coming decades—including workplace productivity, unemployment duration, inequality and the gender pay gap, worker migration, employee turnover, and more.

In this report, we briefly summarize what we've learned so far from economic research on workplace transparency and how it affects three stages of the employment cycle: job search, pay negotiation, and on-the-job performance.

Early Economic Ideas on Transparency

In a seminal 1962 article, economist George Stigler described the economics of information in the labor market for the first time. In it, he describes the dearth of information available to new college grads, and developed the first theory of how salary secrecy affects job seekers:

“The young person entering the labor market for the first time has an immense number of potential employers, scarce as they may seem the first day. If he is an unskilled or a semi-skilled worker, the number of potential employers is strictly in the millions. Even if he has a specialized training, the number of potential employers will be in the thousands....

“No worker, unless his degree of specialization is pathological, will ever be able to become informed on the prospective earnings which would be obtained from every one of these potential employers at any given time, let alone keep this information up to date. He faces the problem of how to acquire information on the wage rates, stability of employment, conditions of employment, and other determinants of job choice, and how to keep this information current.”

Source: George J. Stigler (1962). “Information in the Labor Market,” *Journal of Political Economy*, Vol. 70 No. 5.

3. For an early view on how transparency and workplace information affects the economics of labor markets see the celebrated 1962 article, “Information in the Labor Market” by George Stigler, *Journal of Political Economy*, Vol. 70 No. 5.

I. Job Search and Transparency

The first stage of the employment cycle is *job search*. Unemployed workers search for open positions, and employed workers look for better or higher paying jobs elsewhere. How does job transparency affect this process?

Economists think about job search as a *matching process*.⁴ Job seekers decide how much effort to spend looking for jobs—either consciously or subconsciously—and that effort affects how likely they are to get matched up with employers. When deciding how much to search, job seekers compare the costs and benefits to themselves of searching.⁵ The benefits are the prospect of finding a better job or a higher salary. The costs are the time and effort to gather facts about job openings, pay and working conditions.

In general, labor market transparency lowers the costs of job search by making salary and company information more widely available. Transparency encourages more job searching and leads to potentially higher quality job matches. In theory, these better job matches mean better productivity, higher pay and shorter unemployment spells. So what does the academic research say?

- **More Search Effort:** A 2014 study by Tufts University economist Laura Gee found that offering job seekers more information—in this case, telling them how many others had applied for a job—significantly boosted online job search effort. More importantly, providing more job transparency improved the gender balance of applicant pools by encouraging significantly more female job applicants.⁶
- **Moving to Where Good Jobs Are:** A 1991 study by economist Tara Vishwanath found the quality of job information has a dramatic effect on workers looking to move to new cities. More transparency improves relocation decisions, and better information about salaries promotes movement to areas with the strongest job markets.⁷ This highlights potential benefits from online tools such as Glassdoor’s “Job Explorer,” which allows job seekers to quickly identify job opportunities across the U.S.⁸

4. Dale T. Mortensen and Christopher Pissarides (1994). “Job Creation and Job Destruction in the Theory of Unemployment,” *Review of Economic Studies*, Vol. 61, No. 3.

5. John J. McCall (1970). “Economics of Information and Job Search,” *Quarterly Journal of Economics*, Vol. 84, No 1.

6. Laura K. Gee (2014). “The More You Know: The Effect of Information on Job Application Rates in a Large Field Experiment,” Tufts University Working Paper.

7. Tara Vishwanath (1991). “Information Flow, Job Search, and Migration,” *Journal of Development Economics*, Vol. 36 No. 2.

8. Glassdoor’s “Job Explorer” tool is available at www.glassdoor.com/job/explorer/index.htm.

- **Efficiency in Job Markets:** As long ago as 2001, MIT economist David Autor recognized that “job boards and other Internet labor market connections should increase the efficiency with which workers are matched to jobs.” He highlights several predictions from economic theory, including that growing job transparency is likely to raise worker productivity and wages, and help shorten unemployment spells.⁹
- **Fewer Discouraged Workers:** In a classic 1970 article, UCLA economist John J. McCall outlined the early theory of how better labor market information affects job search. He shows how greater job transparency lowers search costs and helps reduce “discouraged workers” who’ve dropped-out of the labor market—a significant problem that has plagued the U.S. labor market in the wake of the 2007-2009 recession. In this study, McCall famously argued that making job information more widely available could do as much to reduce workforce drop-outs than more costly worker re-training programs.¹⁰

Workplace Transparency is On the Way

Most economists agree the main factor driving job transparency today is growing online company and job information. The anonymity of the web has made it possible to safely and easily share workplace information at a scale that was never before possible. Compensation expert Howard Risher recently highlighted these trends in the journal *Compensation & Benefits Review*:

“Pay confidentiality has been eroding for years.... Millennials share every thought it seems. And they want to understand management actions. When that’s combined with the growing number of web-based sources of salary data—for example, SalaryExpert or Glassdoor—it is no longer possible to keep employees in the dark.

“All of this leads me to believe pay confidentiality will be impossible to maintain. The pressure is likely to increase as young employees enter the workforce in greater numbers. HR offices need to prepare for what will almost certainly emerge.”

Source: Howard Risher (2014). “Pay Transparency is Coming,” *Compensation & Benefits Review*, Vol. 46 No. 1.

9. David H. Autor (2001). “Wiring the Labor Market,” *Journal of Economic Perspectives*, Vol. 15 No. 1.

10. John J. McCall (1970). “Economics of Information and Job Search,” *Quarterly Journal of Economics*, Vol. 84, No 1.

II. Salaries and Transparency

The second stage of the job cycle begins when workers obtain a job offer and begin negotiating with companies over pay. Economists refer to this stage as *wage bargaining*. How should we expect greater workplace transparency to affect salary negotiations?

To an economist, the key to efficient bargaining is for both parties to have good information. Unfortunately, good information can be hard for workers to find in the labor market. Companies typically have much more information about pay, benefits and working conditions than job seekers, and this so-called “information asymmetry” puts a wall between workers and employers. In theory, better job transparency should improve these types of pay negotiations, both for workers and companies. So what does the academic research say?

- **Better Wages:** A 1992 paper from economists Richard Hofler and Kevin J. Murphy investigates the degree of shortfall between what workers actually earn and what they could have earned if job information were cheaper and more widely available. They find U.S. wages were roughly 10 percent lower in the early 1990s than they could’ve been in a world with costless job information.¹¹ In today’s U.S. economy, that would translate into a loss of roughly \$757 billion per year in lower wages.¹²
- **Paycheck Fairness:** Economic theory says that job transparency should lead to “pay compression,” which is where similar workers have similar pay, and salary transparency helps eliminate errors between identical workers. A 2014 study by Princeton University economist Alexandre Mas found a policy that made salaries of public employees more transparent ended up compressing pay of top city managers by 8 percent, suggesting that pay transparency can help expose and correct hard-to-justify pay gaps in the workplace.¹³
- **Inequality and Information:** Before the era of online job information, workers relied more heavily on word-of-mouth information about labor markets from friends and family. A 2004 study from economists Yannis Ioannides and Linda Datcher Louri

11. R.A. Hofler and K.J. Murphy (1992). “Underpaid and Overworked: Measuring the Effect of Imperfect Information on Wages,” *Economic Inquiry*, Vol. 30, No. 3.

12. Based on Q4 2014 annualized U.S. wages and salaries of \$7.573 trillion from the U.S. Bureau of Economic Analysis’ NIPA Table 2.1, Line 3.

13. Alexandre Mas (2014). “Does Transparency Lead to Pay Compression?,” *NBER Working Paper* No. 20558.

14. Y.M. Ioannides and L. Datcher Louri (2004). “Job Information Networks, Neighborhood Effects, and Inequality,” *Journal of Economic Literature*, Vol. 42, No. 4.

found gender and racial gaps in access to informal sources of job information, potentially disadvantaging low-income and minority households who lack informal professional networks.¹⁴ Greater online job transparency may help fill these gaps in job opportunities for some workers.

Closing the Gender Pay Gap?

A well-known fact about today's labor market is the persistent disparity between wages paid to men and women. Overall, women earn roughly \$0.81 per dollar compared to men,¹⁵ and even high-quality studies that control for differences in experience, occupation and education still find a pay gap of roughly \$0.93 to \$0.95 per hour.¹⁶ What does the research tell us about how salary transparency can help alleviate gender pay gaps?

- ***Equalizing Negotiations:*** A 2012 study by economists Andreas Leibbrandt and John List found that a major contributor to the gender pay gap is a negotiation gap. Women are much less likely to negotiate with employers over salaries than men. But when researchers explicitly told all job seekers that pay was negotiable, this gender gap completely disappeared. This highlights one mechanism by which online sharing of company interview experiences can help mitigate gender differences in pay bargaining.¹⁷
- ***Reducing Job Uncertainty:*** A 2009 study by economists Rachel Croson and Uri Gneezy documents persistent differences in “risk aversion” between men and women in a variety of economic contexts. When there is little or no information available about pay and benefits for job openings, these positions are “riskier” and this fact alone may discourage women from apply to and competing for them. Providing better information about likely salaries, company culture, and work-life balance can help resolve this uncertainty, potentially closing an important source of the gender pay gap.¹⁸
- ***The Push for Transparency:*** Recognizing the power of pay transparency to help mitigate gender pay gaps, some legal scholars have called for mandatory pay transparency among U.S. employers. A 2013 study by Marianne DelPo Kulow makes a legal case for mandatory wage disclosure laws,¹⁹ while a 2011 article by Deborah Thompson Eisenberg argues that pay transparency can serve as a “market based” way to eliminate gender discrimination in pay.²⁰

15. U.S. Bureau of Labor Statistics (May 2014), “Women in the Labor Force: A Databook,” *BLS Report No. 1049*, Table 16, figure for 2012. Available online at: www.bls.gov/opub/reports/cps/womenlaborforce_2013.pdf.

16. CONSAD Research Corporation (2009). “An Analysis of Reasons for the Disparity in Wages Between Men and Women,” Research report prepared for the U.S. Department of Labor.

17. A. Leibbrandt and J.A. List (2012). “Do Women Avoid Salary Negotiations? Evidence from a Large Scale Natural Field Experiment,” *NBER Working Paper* No. 18511.

18. Rachel Croson and Uri Gneezy (2009). “Gender Difference in Preferences,” *Journal of Economic Literature*, Vol. 47 No. 2.

19. M. DelPo Kulow (2013). “Beyond the Paycheck Fairness Act: Mandatory Wage Disclosure Laws,” *Harvard Journal on Legislation*, Vol. 50, No. 2.

20. Deborah Thompson Eisenberg (2011). “Money, Sex, and Sunshine: A Market-Based Approach to Pay Discrimination,” *Arizona State Law Journal*, Vol. 43.

III. Transparency and Job Performance

Once job seekers have accepted an offer from an employer, the final stage of the job cycle is *on-the-job performance*. Do companies with more transparent pay information have more productive and engaged employees? Are workers in transparent workplaces more satisfied?

Unlike the previous research described above, this branch of the academic literature is less settled. Most studies find workplace transparency has an overall positive impact on company productivity. However, many laboratory studies from the field known as “experimental economics” find more mixed results.

- ***Secrecy and Job Satisfaction:*** A pioneering 1967 study by compensation expert Edward Lawler showed that pay secrecy can lead to a more dissatisfied workforce.²¹ He found that when employees don’t know what others are earning, they tend to overestimate their coworkers’ pay, leading to higher levels of job dissatisfaction than if actual pay information were made available as common information.
- ***Work Effort and Transparency:*** A 2013 study by economist Emiliano Huet-Vaughn conducted a large field experiment that exposed some workers to information about their peers’ pay but not others. He found workers under a more transparent pay regime “provide significantly more labor effort on average than those with no information about peer earnings.”²² The study’s results were summarized in a 2014 Atlantic Monthly article: “[P]ay transparency in some workplaces has the potential to boost economic output by improving the productivity of workers.”²³
- ***Productivity and Transparency:*** A 2011 study from Jordi Vidal and Mareike Nossol at the London School of Economics examined what happened at companies that switched from a policy of pay secrecy to one of open compensation. Giving workers information about relative pay led to “a large and long-lasting increase in productivity that is *costless* to the firm” (emphasis in original).²⁴

21. Edward E. Lawler (1967). “Secrecy about Management Compensation: Are There Hidden Costs?,” *Organizational Behavior and Human Performance*, Vol. 2, No. 2.
22. Emiliano Huet-Vaughn (2013). “Striving for Status: A Field Experiment on Relative Earnings and Labor Supply,” Job Market Paper, University of California, Berkeley.
23. Emiliano Huet-Vaughn (April 8, 2014). “The Unexpected Benefit of Telling People What Their Coworkers Make,” *Atlantic Monthly*.
24. Jordi Blanes i Vidal and Mareike Nossol (2011). “Tournaments Without Prizes: Evidence from Personnel Records,” *Management Science*, Vol. 57, No. 10.

- ***Pay Information and Effort:*** A 2010 experimental study by economists Andrew Clark, David Masclet and Marie Villeval found that sharing information about workers' pay relative to others significantly boosted work effort, even after controlling for the effect of individual pay. Sharing workplace information led to much higher work effort: each one-unit change in salary rank (out of five) led to a jump in employee effort that was equivalent to giving them a 33 percent pay increase.²⁵
- ***Some Negative Evidence:*** It is important to note that there also exists some contrary evidence on the workplace benefits of pay transparency. A 2012 study by David Card et al. found that public pay disclosure for University of California employees led to lower job satisfaction by many low-paid workers, leading to significant job dissatisfaction.²⁶ Similar effects have been reported in several laboratory style experimental studies.²⁷ However, many economists argue that even these finding may have a valuable silver lining: if salary transparency leads to dissatisfaction by under-paid workers, it helps encourage them to renegotiate pay or move elsewhere to better-fitting job matches, improving efficiency in the labor market.²⁸

25. A.E. Clark *et al.* (2010). "Effort and Comparison Income: Experimental and Survey Evidence," *Industrial and Labor Relations Review*, Vol. 63, No. 3.

26. D. Card, *et al.* (2012). "Inequality at Work: The Effect of Peer Salaries on Job Satisfaction," *American Economic Review*, Vol. 102, No. 6.

27. For a summary of the experimental evidence on pay transparency, see Hong Liu-Kiel, C. Bran Cadsby, Heike Y. Schenk-Mathes, Fei Song, and Xiaolan

Yang (2013). "A Cross-Cultural Real-Effort Experiment on Wage-Inequality Information and Performance," *B.E. Journal of Economic Analysis & Policy*, Vol. 13, No. 2.

28. See for example, Daniel Indiviglio (July 20, 2011). "The Case for Making Wages Public: Better Pay, Better Workers," *Atlantic Monthly*.

Conclusion

Interest in workplace transparency—both among companies and job seekers—has surged in recent years. From this brief report, several lessons from economic research on the impact of workplace transparency are clear.

More and better information in job markets leads to smarter job searching, improved fairness in pay setting, more diverse applicant pools, potentially shorter unemployment spells, smarter relocation decisions, and—at least according to the majority of published research—a more engaged and productive workforce.

As workers increasingly turn to online sources for job and company information in the coming decades, this research suggests several areas to watch for evidence of the broader economic effects of expanding career communities such as Glassdoor on today's job market.

References

- David H. Autor (2001). "Wiring the Labor Market," *Journal of Economic Perspectives*, Vol. 15 No. 1.
- David Card, A. Mas, E. Moretti, and E. Saez (2012). "Inequality at Work: The Effect of Peer Salaries on Job Satisfaction," *American Economic Review*, Vol. 102, No. 6.
- Andrew E. Clark, David Masclet, and Marie Claire Villeval (2010). "Effort and Comparison Income: Experimental and Survey Evidence," *Industrial and Labor Relations Review*, Vol. 63, No. 3.
- CONSAD Research Corporation (2009). "An Analysis of Reasons for the Disparity in Wages Between Men and Women," Research report prepared for the U.S. Department of Labor.
- Rachel Croson and Uri Gneezy (2009). "Gender Difference in Preferences," *Journal of Economic Literature*, Vol. 47 No. 2.
- Deborah Thompson Eisenberg (2011). "Money, Sex, and Sunshine: A Market-Based Approach to Pay Discrimination," *Arizona State Law Journal*, Vol. 43.
- Laura K. Gee (2014). "The More You Know: The Effect of Information on Job Application Rates in a Large Field Experiment," Tufts University Working Paper.
- Richard A. Hofler and Kevin J. Murphy (1992). "'Underpaid and Overworked: Measuring the Effect of Imperfect Information on Wages," *Economic Inquiry*, Vol. 30, No. 3.
- Daniel Indiviglio (July 20, 2011). "The Case for Making Wages Public: Better Pay, Better Workers," *Atlantic Monthly*.
- Yannis M. Ioannides and Linda Datcher Loury (2004). "Job Information Networks, Neighborhood Effects, and Inequality," *Journal of Economic Literature*, Vol. 42, No. 4.
- Marianne DelPo Kulow (2013). "Beyond the Paycheck Fairness Act: Mandatory Wage Disclosure Laws—A Necessary Tool for Closing the Residual Gender Wage Gap," *Harvard Journal on Legislation*, Vol. 50, No. 2.
- Edward E. Lawler (1967). "Secrecy about Management Compensation: Are There Hidden Costs?," *Organizational Behavior and Human Performance*, Vol. 2, No. 2.
- Andreas Leibbrandt and John A. List (2012). "Do Women Avoid Salary Negotiations? Evidence from a Large Scale Natural Field Experiment," *NBER Working Paper* No. 18511.
- Hong Liu-Kiel, C. Bran Cadsby, Heike Y. Schenk-Mathes, Fei Song, and Xiaolan Yang (2013). "A Cross-Cultural Real-Effort Experiment on Wage-Inequality Information and Performance," *B.E. Journal of Economic Analysis & Policy*, Vol. 13, No. 2.
- Alexandre Mas (2014). "Does Transparency Lead to Pay Compression?," *NBER Working Paper* No. 20558.
- John J. McCall (1970). "Economics of Information and Job Search," *Quarterly Journal of Economics*, Vol. 84, No 1.
- Dale T. Mortensen and Christopher Pissarides (1994). "Job Creation and Job Destruction in the Theory of Unemployment," *Review of Economic Studies*, Vol. 61, No. 3.
- George J. Stigler (1962). "Information in the Labor Market," *Journal of Political Economy*, Vol. 70 No. 5.
- U.S. Bureau of Labor Statistics (May 2014), "Women in the Labor Force: A Databook," BLS Report No. 1049.
- Emiliano Huet-Vaughn (2013). "Striving for Status: A Field Experiment on Relative Earnings and Labor Supply," Job Market Paper, University of California, Berkeley.
- Emiliano Huet-Vaughn (April 8, 2014). "The Unexpected Benefit of Telling People What Their Coworkers Make," *Atlantic Monthly*.
- Jordi Blanes i Vidal and Mareike Nossol (2011). "Tournaments Without Prizes: Evidence from Personnel Records," *Management Science*, Vol. 57, No. 10.
- Tara Vishwanath (1991). "Information Flow, Job Search, and Migration," *Journal of Development Economics*, Vol. 36 No. 2.

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