How Do Employers Recruit New Workers?

Article by: Steven J Davis, Claudia Macaluso and Sonya Ravindranath Waddell

While data on the number of job openings and hires are readily available, data on how hires happen are less so. The Richmond Fed surveyed employers around the Fifth Federal Reserve District to shed light on how employers recruit new workers. We find that recruiting for many jobs starts well before the 30-day window defined by the Job Openings and Labor Turnover Survey (JOLTS) for active vacancies, meaning those job openings may not be counted by JOLTS. We also note that referrals and recommendations are among the most popular methods for finding job candidates and explore why.

Standard sources of statistical information about U.S. labor markets report the number of hires and job openings but say little about how hiring happens. This leaves several important questions:

- What methods do employers use to recruit prospective employees?
- How do recruiting methods differ by employer size and industry?
- When do employers start recruiting to fill an open job position?

A few studies have shown that recruiting intensity per job opening matters greatly for the pace of hiring, but these studies also say little about how employers actually recruit workers.¹

A better understanding of recruiting methods and the hiring process would be useful for several reasons. For one, methods that rely heavily on personal contacts and referral networks could disadvantage job seekers who are not tied into the relevant networks. For another, if initial job interviews now take place mostly online, job seekers who lack ready access to high-quality internet service could be disadvantaged. These concerns have become more acute, because the pandemic brought especially high rates of job loss for minorities, less-educated workers and those with low earnings.
Surveying Employers on Recruiting Methods

To throw new light on recruiting methods and the hiring process, the Federal Reserve Bank of Richmond sampled 308 employers across three survey waves:

- The February 2020 wave, which ran Jan. 31-Feb. 19 and asked respondents about recruiting efforts for the position their firm most recently filled or sought to fill in the prior 12 months
- The June 2020 wave, which ran May 28-June 17, covered the same topics as the February 2020 wave and also asked about the most recent position over the previous three months
- The March 2021 wave, which ran March 17-31 and asked about recruiting efforts for the typical open position in the last 12 months

We oversampled mid-size firms with 51-500 employees, undersampled smaller firms and oversampled manufacturing firms, as seen in Table 1.

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Sample</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50 Employees</td>
<td>34%</td>
<td>75%</td>
</tr>
<tr>
<td>51-500 Employees</td>
<td>49%</td>
<td>7%</td>
</tr>
<tr>
<td>500+ Employees</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>N</td>
<td>239</td>
<td>7,912,405</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Sample</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>29%</td>
<td>4%</td>
</tr>
<tr>
<td>Natural Resources, Construction, Utilities</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>45%</td>
<td>53%</td>
</tr>
<tr>
<td>Retail/Wholesale, Transportation/Warehousing, Leisure/Hospitality</td>
<td>20%</td>
<td>33%</td>
</tr>
<tr>
<td>N</td>
<td>299</td>
<td>7,912,405</td>
</tr>
</tbody>
</table>

Notes: The first two waves sampled employers in the Fifth Federal Reserve District (Maryland, District of Columbia, Virginia, North Carolina, South Carolina and most of West Virginia). For the third wave, the Richmond Fed interviewed organizations in Virginia. Firm size and sector information was not available for all respondents. Sample size discrepancies between size panel and sector panel are due to missing values. Percentages may not sum to 100 due to rounding. U.S. tabulations are based on the Census Bureau’s 2018 Statistics of U.S. Businesses Annual Datasets.

Active Recruitment Often Begins Early

Many employers start recruiting for open positions long before they intend for someone to begin work. As shown in Table 2, 43 percent of employers in our sample began recruiting at least six weeks in advance of the desired start date, and 13 percent began recruiting 12 or more weeks in advance.
Thus, for many job openings, the cycle from inception of recruitment efforts to the start of work stretches over many weeks or months. This result aligns with evidence in earlier studies on the often-long spell between vacancy posting and the start of work by a new hire.²

This finding has important implications for the measurement of job vacancies. In its Job Openings and Labor Turnover Survey (JOLTS), the Bureau of Labor Statistics defines an active vacancy as one for which "work could start within 30 days." Our results in Table 2 suggest that this concept is overly restrictive and may lead to an undercount of open job positions.

Consider a firm that starts recruiting 12 weeks in advance of when it would like a new employee to begin work. Suppose the firm finds someone to fill the position six weeks after it starts recruiting (and, hence, six weeks before the new recruit actually starts to work). In these circumstances, the job opening is never counted in JOLTS.

Indeed, careful analysis of JOLTS data reveals that many hires are not mediated through vacancies that fit the JOLTS definition, as noted in the 2013 Quarterly Journal of Economics paper "The Establishment-Level Behavior of Vacancies and Hiring" by Steven Davis, Jason Faberman and John Haltiwanger.

**Employers Rely Heavily on Recommendations and Referrals**

Employers use a variety of recruiting methods to attract candidates to their open jobs, as seen in Figures 1a and 1b.
Figure 1a: Recruiting Methods

Employer Size

- Employee Rec/Referral: 0-50 Employees 65%, 51% | 51-500 Employees 59%, 47% | 500+ Employees 52%, 47%
- External Rec/Referral: 0-50 Employees 62%, 47% | 51-500 Employees 51%, 47% | 500+ Employees 41%, 18%
- Headhunter/Temp Agency: 0-50 Employees 31%, 26% | 51-500 Employees 44%, 26% | 500+ Employees 30%, 18%
- Advertising: 0-50 Employees 76%, 84% | 51-500 Employees 84%, 92% | 500+ Employees 30%, 18%
- Education/Training Institutions: 0-50 Employees 64%, 41% | 51-500 Employees 41%, 20% | 500+ Employees 20%, 36%
- Recall/Rehire: 0-50 Employees 11%, 36% | 51-500 Employees 36%, 36% | 500+ Employees 20%, 36%
- Mass Recruit/Other: 0-50 Employees 62%, 34% | 51-500 Employees 34%, 34% | 500+ Employees 62%, 62%


Notes: Employee and external recommendation/referral covers recommendations from employees and from individuals outside of the firm, respectively. Headhunter/temp agency covers the use of a headhunter, temp agency or staffing agency. Advertising covers using social media, online job boards or traditional media outlets to advertise openings. Education/training institutions covers partnerships with educational or training institutions. Recall/rehire covers recalling or rehiring employees. Mass recruit/other covers job fairs, mass recruiting campaigns and other methods.
Also, 80 percent of respondents use at least two recruiting methods per open job, as seen in Table 3.

<table>
<thead>
<tr>
<th>Number of Methods Used</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>54</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>56</td>
<td>21%</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>19%</td>
</tr>
<tr>
<td>4</td>
<td>49</td>
<td>18%</td>
</tr>
<tr>
<td>5</td>
<td>34</td>
<td>13%</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>7%</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td></td>
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</table>


We found that larger employers tend to use more recruiting methods than smaller employers: The median number of methods used by employers with less than 50 employees was two, while the median for employers with more than 500 employees was five.
Some common recruiting methods receive little or no attention in leading economic models of how employers match with workers. For example, employers rely heavily on recommendations and referrals from their own employees and from people outside the firm. In addition, respondents engage in partnerships with educational and training institutions, headhunters and staffing firms, echoing evidence from the 2020 working paper "Application Flows (PDF)" by Steven Davis and Brenda Samaniego de la Parra. These network-based recruiting channels are especially important for hiring in professional services. They are also important in other sectors. For example, even in manufacturing, which had the lowest share, 45 percent of manufacturers rely on employee referrals to attract applicants. Smaller firms rely less on network-based recruiting methods (especially partnerships and professional intermediaries) and more on social media advertisements, newspapers, radio and job boards.

Forty-three percent of respondents say they are accepting applications and screening candidates, even when they have no immediate vacancy to fill. This result suggests that firms sometimes recruit new workers in an opportunistic manner, creating a position and hiring someone to fill it when a sufficiently attractive candidate becomes available. This type of behavior also leads to hires that are not mediated through vacancies, as the concept is defined in JOLTS.

**Impact of Referrals and Recommendations on Employers and Employees**

Why do employers rely on personal recommendations and referrals, which are subjective and possibly biased? As seen in Figure 2, 51 percent of our survey participants claim that recommendations and referrals yield "better candidates," which suggests that they help employers solve a screening problem in the presence of *hidden information*. 
The idea here is that an employer cannot readily ascertain the true ability of a prospective new hire or the quality of a match. Someone who knows the candidate personally or is professionally trained to screen workers can supply valuable information. In fact, 31 percent of our respondents explicitly state that recommendations and referrals "save time/resources evaluating candidate quality."

Another theory emphasizes monitoring problems in the presence of hidden actions. The idea is that employers cannot detect and punish all instances of bad conduct or bad performance on the job. Referrals and recommendations alleviate this concern when workers are responsive to potential punishments via the network. This can occur through the disappointment or anger of a recommender or through the unwillingness of the current employer to provide a positive recommendation to prospective future employers. About 30 percent of respondents declare that referrals and recommendations yield candidates who are "less likely to perform poorly" and/or "more likely to be trustworthy." This finding suggests that networks play an important role in encouraging strong worker performance.

Interestingly, 36 percent of respondents also indicate that network-based recruiting is excellent for "promotion of company and positions." This provides another potential reason for employers to participate in some recruiting activities, even when they do not have
specific job openings.

**Conclusion**

The Richmond Fed's Survey of Employer Recruiting Behavior (SERB) aims to deepen our understanding of how firms recruit workers. Results thus far indicate that many employers start recruiting much more than 30 days before the desired start date for the new hire.

SERB data also highlight the prevalence of network-based recruiting: recommendations, referrals, partnerships with educational institutions, and intermediated hiring. Our evidence also indicates that network-based recruiting can lower hiring costs, yield recruits of higher quality and promote stronger employee performance.

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1 These studies include the 2013 Quarterly Journal of Economics paper "The Establishment-Level Behavior of Vacancies and Hiring" by Steven Davis, Jason Faberman and John Haltiwanger; the 2018 American Economic Review paper "Aggregate Recruiting Intensity" by Alessandro Gavazza, Simon Mongey and Giovanni Violante; and the 2020 working paper "Macro Recruiting Intensity from Micro Data" by Mongey and Violante.


3 Studies discussing this aspect include the 2013 Review of Economic Dynamics paper "Learning About Match Quality and the Use of Referrals" by Manolis Galenianos and the 2016 Journal of Labor Economics paper "Social Networks, Employee Selection and Labor Market Outcomes" by Lena Hensvik and Oskar Nordström Skans.

4 Giorgio Topa's chapter "Labor Markets and Referrals" from the 2011 Handbook of Social Economics provides a review of research that explores the screening idea in the hiring context.

5 This is an idea long ago suggested in the 1966 American Economic Review paper "Information Networks in Labor Markets" by Albert Rees and further developed by the 2013 Review of Economic Dynamics paper "Learning About Match Quality and the Use of Referrals" by Manolis
Galenianos and the 2016 Journal of Labor Economics paper "Social Networks, Employee Selection and Labo...

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