

## Employers in Health Services Struggle to Fill Open Job Positions

### The Sector's Mean Vacancy Duration Rises to 51 Working Days in Early 2017

The **DHI-DFH Mean Vacancy Duration Measure** rose to 27.8 working days in February, 1.1 days above its revised value for January and 1.8 days below its historical peak in April 2016. Figure 1 shows the evolution of the mean vacancy duration in the United States since 2001. This duration measure reflects the vacancy concept in the Job Openings and Labor Turnover Survey (JOLTS). Specifically, a job opening gets “filled” according to JOLTS when a job offer for the open position is accepted. Thus, the duration statistic refers to the average length of time required to fill open positions. Typically, there is also a lag between the fill date and the new hire's start date on the new job.

Figure 2 displays four other indicators of labor market slack alongside the mean vacancy duration. All five measures show a pronounced tightening of U.S. labor markets since 2009. Three of the measures – mean vacancy duration, the vacancy-unemployment ratio, and the ratio of vacancies to the number of persons unemployed for 26 weeks or less – now exceed their peak values prior to the recession of 2008-2009. The post-recession rise in the mean vacancy duration is especially pronounced.

The **DHI-DFH Recruiting Intensity Index**, plotted in Figure 3, fell to 1.03 in February from a revised level of 1.04 in January. Tables 1 and 2 below report industry-level statistics for mean vacancy duration and recruiting intensity per vacancy, respectively. For job openings in Health Services, the mean duration rose from 34.6 working days in 2013 to 47.7 days 2016 and 50.7 in the first two months of 2017. Financial Services has also seen a large rise in mean vacancy duration – from 36.1 working days in 2013 to 44.7 in 2016 and 48.7 in the first two months of 2017.

“Employers in Health Services and Financial Services face significant challenges in finding and recruiting new hires” said Dr. Steven Davis, William H. Abbott Professor of International Business and Economics at the University of Chicago Booth School of Business. Davis is a co-developer of the DHI Database and co-creator of the DHI-DFH Mean Vacancy Duration Measure and Recruiting Intensity Index.

“The recruiting environment for tech professionals has always been driven by in-demand skills and ability to find qualified candidates,” said Michael Durney, President and CEO of DHI Group, Inc. “That said, there are some tech specialties that have experienced tighter market conditions than others. Tech pros who are flexible, resilient and, most importantly, continuously brush up on their craft, are in a unique position to manage their careers and ask for ideal compensation.”

Figure 1. DHI-DFH Measure of National Mean Vacancy Duration, January 2001 to February 2017

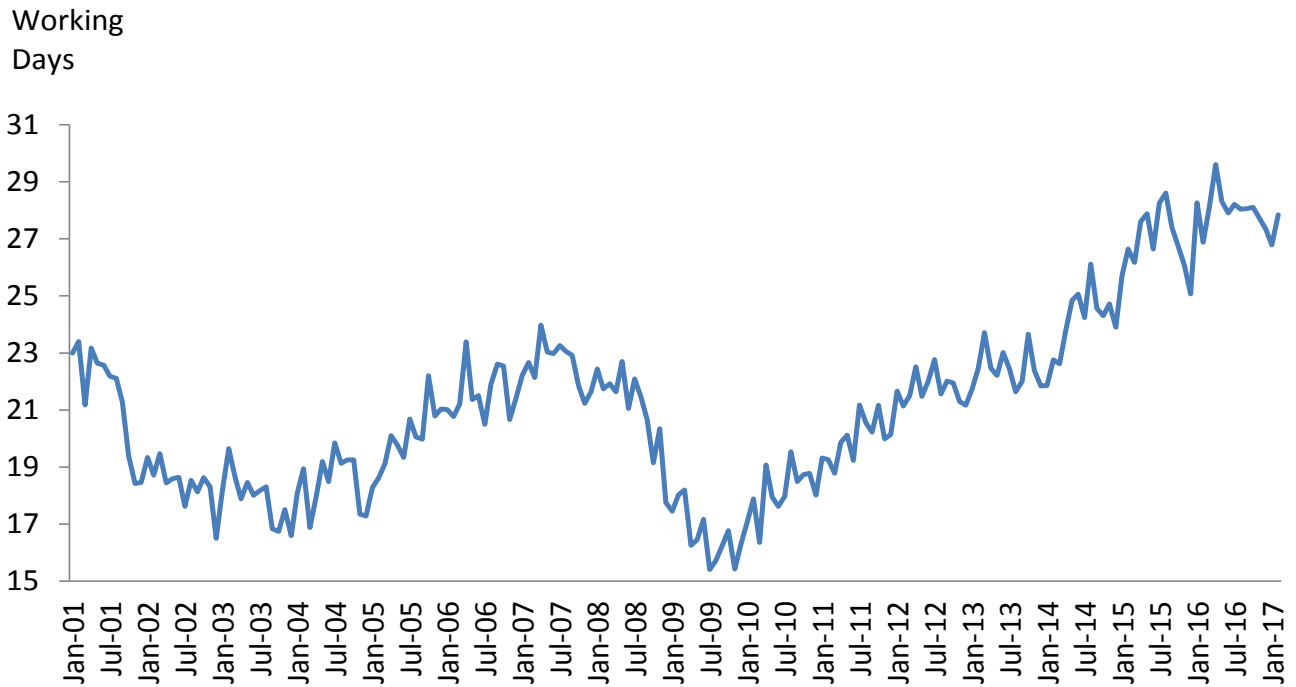
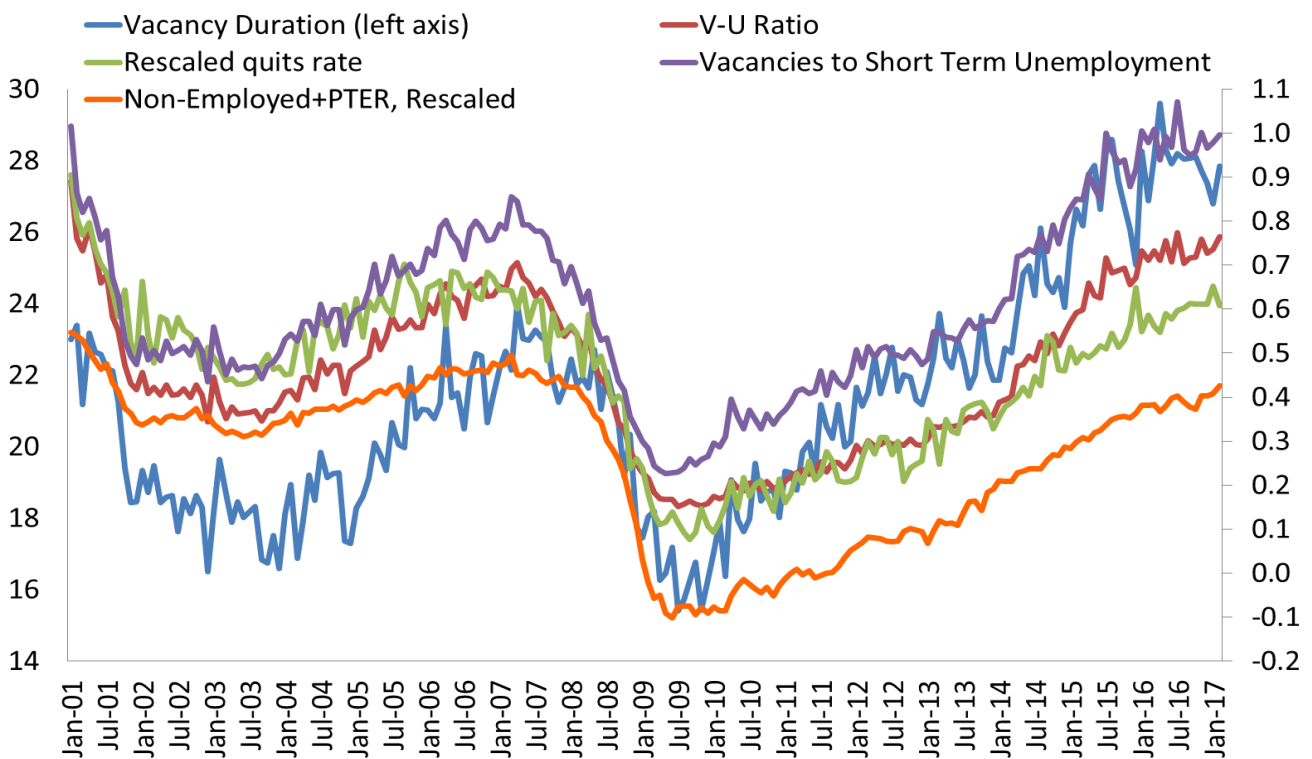


Figure 2. National Labor Market Slackness Measures, January 2001 to February 2017



Notes: Short Term Unemployment is the number of persons unemployed 26 weeks or less. The Quit Rate is rescaled to have the same mean and variance as the Vacancy-Unemployment Ratio from January 2001 to date. Non-Employment + PTER, an index developed by Hornstein, Kudlyak and Lange, reflects all persons who are not employed (weighted by labor force attachment) plus persons working part time for economic reasons who would prefer full-time work full. Here, their index is multiplied by minus one and then rescaled to have the standard deviation as the Vacancy-Unemployment Ratio from January 2001 to date.

Figure 3.DHI-DFH Index of Recruiting Intensity per Vacancy, January 2001 to February 2017

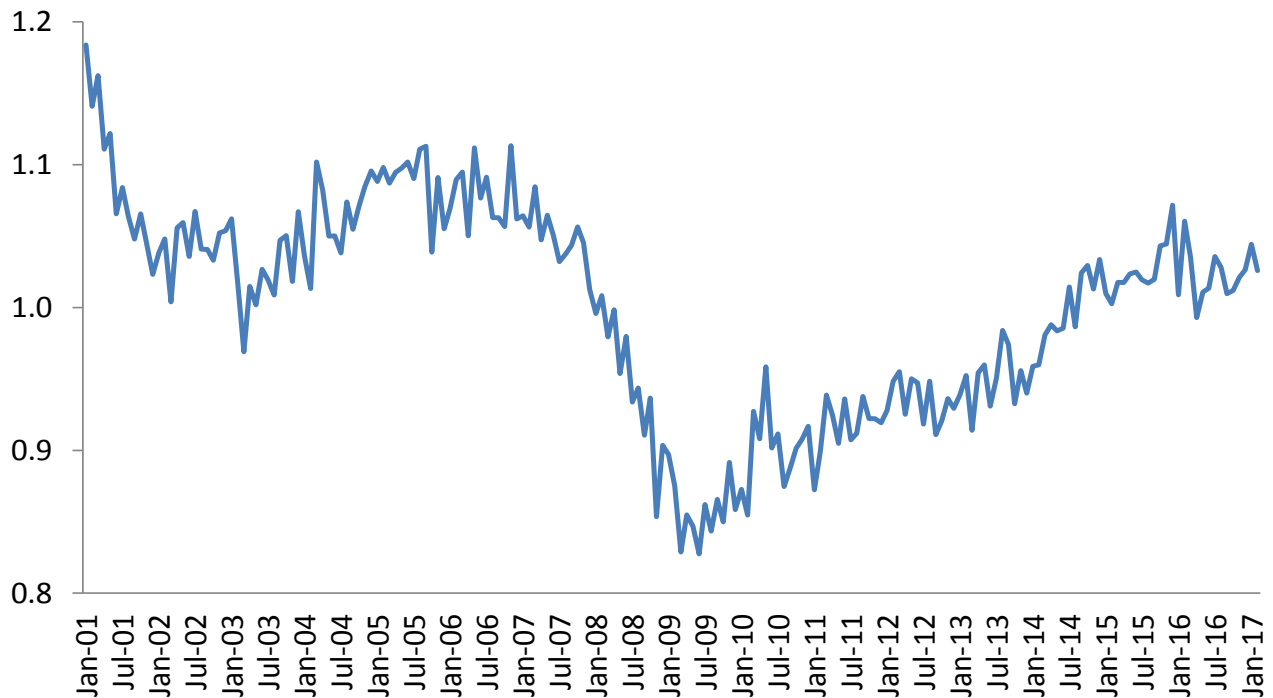


Table 1. DHI-DFH Measure of Mean Vacancy Duration by Industry and Time Period, No. of Working Days, January 2001 to February 2017

	2001 to 2003	2004 to 2006	2008	2009	2010 to 2012	2013	2014	2015	2016	Jan.-Feb. 2017
Resources	12.0	14.0	18.1	13.5	18.7	17.4	22.4	17.4	13.0	17.5
Construction	7.9	8.8	7.3	4.3	6.1	9.5	10.9	11.4	14.9	10.4
Manufacturing	17.4	20.9	21.6	13.8	23.4	28.4	29.2	30.4	32.1	30.5
Wholesale and Retail Trade	14.2	15.8	15.5	13.1	15.9	19.8	18.6	21.0	24.1	23.7
Warehouse, Trans. & Utilities	18.6	17.0	20.6	11.3	18.2	22.5	23.9	29.1	27.3	24.7
Information	25.8	36.0	34.5	23.4	40.9	36.4	36.8	35.6	29.1	24.1
Financial Services	28.0	32.1	27.6	25.7	33.3	36.1	37.1	43.2	44.7	48.7
Professional and Business Services	18.3	19.9	21.3	16.6	18.8	19.6	22.0	27.0	26.3	24.3
Education	21.3	25.0	22.0	18.5	21.1	23.7	26.5	29.9	28.8	32.7
Health Services	39.1	35.8	36.4	29.8	33.5	34.6	38.4	44.6	47.7	50.7
Leisure and Hospitality	13.7	14.8	14.9	10.4	13.3	16.6	19.3	19.6	19.7	19.5
Other Services	22.5	18.6	25.2	16.9	18.9	20.1	21.0	22.2	30.2	28.2
Government	33.2	30.7	35.7	32.2	33.0	35.9	37.7	37.8	37.8	36.4
Non-Farm	19.3	20.0	21.1	16.6	20.0	22.5	24.1	26.9	28.0	27.3

Table 2. DHI-DFH Recruiting Intensity Index by Industry and Time Period,  
January 2001 to February 2017

	2001 to 2003	2004 to 2006	2008	2009	2010 to 2012	2013	2014	2015	2016	Jan.-Feb. 2017
Resources	0.99	1.06	1.05	0.70	1.00	0.98	1.04	0.89	1.03	1.31
Construction	1.07	1.04	0.89	0.90	1.01	0.94	0.89	0.88	0.87	0.94
Manufacturing	1.02	1.09	0.95	0.85	0.94	0.88	0.92	0.93	0.96	1.03
Wholesale and Retail Trade	1.05	1.10	0.96	0.84	0.89	0.94	1.04	1.04	1.00	0.99
Warehouse, Trans. & Utilities	0.96	1.13	0.94	0.92	0.96	1.01	1.11	1.12	1.09	1.12
Information	1.10	1.08	0.87	0.83	0.91	1.06	1.11	1.16	1.12	1.19
Financial Services	1.06	1.09	0.99	0.84	0.87	0.99	0.95	0.95	0.92	0.95
Professional and Business Services	1.08	1.07	0.90	0.83	0.94	0.96	1.00	1.01	1.03	1.02
Education	1.00	0.99	1.04	0.96	0.99	0.95	1.00	1.07	1.07	0.93
Health Services	1.08	1.04	1.01	0.93	0.89	0.92	0.97	1.01	1.00	1.01
Leisure and Hospitality	1.08	1.08	0.97	0.84	0.88	0.92	0.96	1.01	1.01	1.01
Other Services	1.02	1.07	0.94	0.96	0.95	0.98	0.96	1.04	0.93	1.09
Government	1.05	1.05	0.94	0.87	0.93	0.93	0.99	1.10	1.13	1.10
Non-Farm	1.05	1.08	0.95	0.86	0.92	0.95	1.00	1.03	1.02	1.04

### ***About the DHI Hiring Indicators***

The **DHI-DFH Recruiting Intensity Index** quantifies the effective intensity of recruiting efforts per vacancy by employers with vacant job positions. The index is normalized to an average value of 1.0 for the period from January 2001 to December 2012. It complements the monthly [Job Openings Rate](#) produced by the U.S. Bureau of Labor Statistics (BLS) from the [Job Openings and Labor Turnover Survey](#).

The pace of new hires in the economy depends on the number and types of job seekers, the number and types of job vacancies, and employer actions that affect how quickly vacant jobs are filled. These actions include the choice of recruiting methods, expenditures on help-wanted ads, how rapidly employers screen job applicants, hiring standards, and the attractiveness of compensation packages offered to prospective new hires. The BLS Job Openings Rate captures the availability of job vacancies in the economy, while the **DHI-DFH Recruiting Intensity Index** captures the intensity of employer efforts to fill those vacancies. The index is available at the national, regional and industry levels and by establishment size class (number of employees).

The index construction follows the method developed by Steven J. Davis, R. Jason Faberman and John Haltiwanger (DFH) in "[The Establishment-Level Behavior of Vacancies and Hiring](#)," published in the May 2013 issue of the *Quarterly Journal of Economics*, and extended to industry and regional indices in "[Recruiting Intensity during and after the Great Recession: National and Industry Evidence](#)," published in the May 2012 issue of the *American Economic Review*.

The **DHI-DFH Vacancy Duration Measure** quantifies the average number of working days taken to fill vacant job positions. It supplements other measures often used to assess the tightness of labor market conditions such as the ratio of vacant jobs to unemployed workers.

Vacancy durations depend on the relative numbers of job seekers and job vacancies, the recruiting and search methods available to employers and job seekers, employer recruiting intensity per vacancy, the search intensity of job seekers, and the degree to which the requirements of jobs on offer match the skills, locations and preferences of job seekers. Other things equal, a larger ratio of job vacancies to job seekers yields longer vacancy durations.

The **DHI-DFH Vacancy Duration Measure** follows the method developed by Steven J. Davis, R. Jason Faberman and John Haltiwanger (DFH) in "[The Establishment-Level Behavior of Vacancies and Hiring](#)," published in the May 2013 issue of the *Quarterly Journal of Economics*. That method combines a simple model of hiring dynamics with data on hires and vacancies from the [Job Openings and Labor Turnover Survey](#) (JOLTS) conducted by the U.S. Bureau of Labor Statistics. Using their model and the JOLTS data, DFH estimate an average daily job-filling rate for vacant job positions in each month. Taking the reciprocal of the daily job-filling rate yields the **DHI-DFH Vacancy Duration Measure**, which is available at the national, regional and industry levels and by establishment size class.

The average daily job-filling rate is closely related to the "vacancy yield," the ratio of hires during the month to the stock of vacancies on the last business day of the previous month. Unlike the vacancy yield, however, the daily job-filling rate (and the **DHI-DFH Vacancy Duration Measure**) adjusts for job vacancies that are posted and filled within the month. Working days are defined as Mondays through Saturdays, excluding major national holidays.

### **About DHI Group, Inc.**

DHI Group, Inc. (NYSE: DHX) is a leading provider of data, insights and connections through our specialized services for professional communities including technology and security clearance, financial services, energy, healthcare and hospitality. Our mission is to empower professionals and organizations to compete and win through expert insights and relevant employment connections. Employers and recruiters use our websites and services to source and hire the most qualified professionals in select and highly-skilled occupations, while professionals use our websites and services to find the best employment opportunities in and the most timely news and information about their respective areas of expertise. For over 25 years, we have built our company on providing employers and recruiters with efficient access to high-quality, unique professional communities, and offering the professionals in those communities access to highly-relevant career opportunities, news, tools and information. Today, we serve multiple markets located throughout North America, Europe, the Middle East and the Asia Pacific region.

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