

October 2014

## Have We Underestimated U.S. Wage Growth?

New data from ADP suggest the job market is healing faster.

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### Abstract

Slack in the job market is being absorbed quickly, and how much remains is an important open question. While perspectives range widely, the consensus among policymakers, financial market participants, and economists appears to be that the amount of slack is still considerable. If it were not, and the economy were approaching full employment, wage growth would be accelerating. This is not evident in most measures of labor compensation from the Bureau of Labor Statistics.

However, this perspective is challenged by newly released data collected by human resource management firm ADP and developed by Moody's Analytics, which show a definitive, broad acceleration in wage growth. While the ADP dataset has various idiosyncrasies that should be considered when assessing its message, it is hard to reconcile that message with the view that a significant amount of slack remains in the labor market.

# Have We Underestimated U.S. Wage Growth?

New data from ADP suggest the job market is healing faster.

BY MARK ZANDI

The U.S. labor market is kicking into high gear. Job growth is robust and, given the recent surge in openings, seems set to accelerate further in coming months. The gains are occurring broadly across industries, regions, company sizes and pay scales.

Slack in the job market is being absorbed quickly, and how much remains is an important open question. While perspectives range widely, the consensus among policymakers, financial market participants, and economists appears to be that the amount of slack is still considerable. If it were not, and the economy were approaching full employment, wage growth would be accelerating. This is not evident in most measures of labor compensation from the Bureau of Labor Statistics.

However, this perspective is challenged by newly released data collected by human resource management firm ADP and developed by Moody's Analytics, which show a definitive, broad acceleration in wage

growth. While the ADP dataset has various idiosyncrasies that should be considered when assessing its message, it is hard to reconcile that message with the view that a significant amount of slack remains in the labor market.

If indeed the economy is approaching full employment and wage growth is accelerating, the implications are significant. Workers may finally begin to participate in the benefits of the economic recovery, supporting that recovery in turn through stronger consumer spending and housing activity. Yet the Federal Reserve may also need to begin normalizing monetary policy, perhaps sooner than policymakers or financial markets currently expect.

## Strong and broad

Job growth is strong, consistent and broad. Job gains are currently averaging approximately 225,000 per month, about as strong as in the last expansion a decade ago.

This is impressive by almost any historical standard. Arguably even more impressive is that employment has been increasing since early 2010.

For most of the economic recovery, the acceleration in the pace of net monthly job gains resulted from declines in the num-

ber of layoffs (see Chart 1). The layoff rate is now about as low as it has been in data available from the Bureau of Labor Statistics. This phenomenon is confirmed by the low and still-falling number of initial claims for unemployment insurance, and by the dearth of announced corporate layoffs.

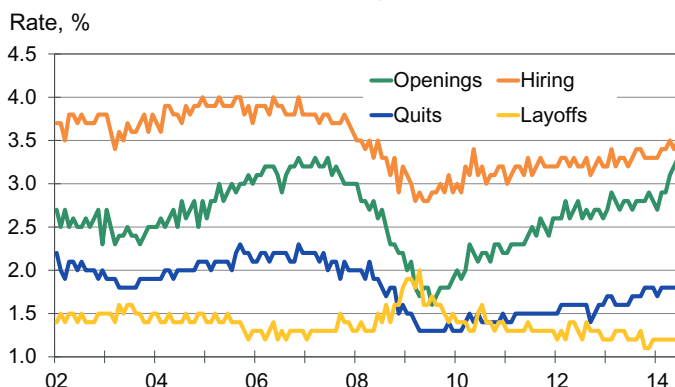
More recently, net job growth has been supported by increased hiring. While the hiring rate is still below prerecession levels, the recent surge in job openings is a very positive sign for better future hiring. In August, the most current month available, the number of openings surpassed the number of hires for the first time in the history of the data. Openings are proliferating across all industries and regions of the country.

The quality of job gains is also much improved. At the start of the recovery most new jobs were in the lower-paying retail and hospitality industries. A few years ago, job gains in higher-paying industries such as technology and energy began to pick up. Over the past couple of years, jobs have also expanded in middle-wage industries such as construction, education and local government (see Chart 2).

## Measuring slack

The accelerated pace of job growth is causing slack in the job market to diminish quickly. "Slack" includes workers who have been unemployed longer than six months, those who left the workforce discouraged by the lack of job opportunities and low wages, and part-timers who would prefer to work full time. Jobs are increasing at about twice the pace needed to re-employ the

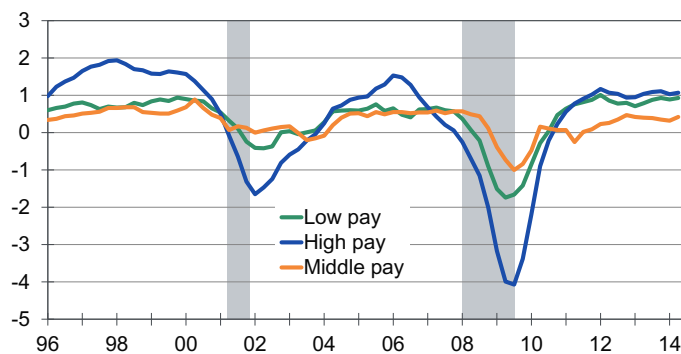
**Chart 1: Job Market Getting Better**



Sources: BLS, Moody's Analytics

**Chart 2: More and Better-Quality Jobs**

Employment, change yr ago, mil



Sources: BLS, Moody's Analytics

unemployed and underemployed, assuming the labor force expands at the same pace as the working-age population, stabilizing the labor-force participation rate.

To quantify this, consider that the economy is on track to create 2.75 million jobs this year (225,000 per month x 12). To keep up with growth in the working-age population and the labor force (assuming a stable participation rate) requires at most 1.4 million net new jobs (115,000 per month x 12). The difference of 1.35 million jobs is equal to about 0.9% of the labor force.

Given that the unemployment rate is 5.9%, this would suggest that in one year the unemployment rate will be closer to 5%. This is below most current estimates of the economy's full-employment unemployment rate, including ours at 5.25%.

It is reasonable to assume a brief period of rising labor-force participation, as some discouraged workers who left the job market during the rough times come back. Some part-timers could also become full-time employees. Adding in these potential sources of additional labor, at the current pace of job growth, slack in the job market could be completely absorbed and the economy back to full employment in late 2016.

The various wage measures provided by the BLS appear consistent with this view. Broad measures of labor compensation such as the employment cost index and compensation per hour have been increasing at an annual pace near 2% throughout the recovery. This is no more than the rate

of inflation during this period, so real wages have been flat. If the economy were approaching full employment, real wages would surely be rising.

**ADP wages**

But what if wage growth is accelerating already, and the BLS wage measures have yet

to pick this up? This is the message in new data from ADP, based on payroll processing records for more than 24 million employees, or about one-fifth of all U.S. workers.

Moody's Analytics helped ADP separate the changes in hourly wages paid to those staying in their jobs, labeled job holders, from wages paid to those who change jobs, new entrants to the workforce, and those leaving it. The data track changes quarterly from the second quarter of 2011 to the third quarter of 2014, long enough allow for seasonal adjustments. The data can also be broken down by industry, region, company size, worker age and gender, tenure on the job, pay scale, and part- vs. full-time.

The hourly wage rate for job holders is the most telling. It is up 4.5% from a year ago in the third quarter, a strong and steady acceleration from its low two years ago. The acceleration in hourly wage growth occurs across the board, although it is up most for younger workers, those with one to five years on the job and at lower pay levels, and those who work at small companies. Wage gains have also picked up most in financial services and construction in the West and South (see Table).

Baby boomers who work at big companies in healthcare and in leisure and hospitality in the Northeast and Midwest have experienced the slowest acceleration in wages.

The ADP-based hourly wage data likely overstate the acceleration in wage growth in the broader labor market for several reasons. First, ADP's client companies tend to

perform better than average, particularly among smaller companies. A small firm will not use a payroll processing service unless its prospects are good.

How much this inflates the ADP data has not been estimated, but judging from the impact on employment, which we have quantified in our work estimating payroll employment (the [ADP National Employment Report](#)), it is meaningful. This may suggest that the ADP data foreshadow broader trends if conditions continue to improve.

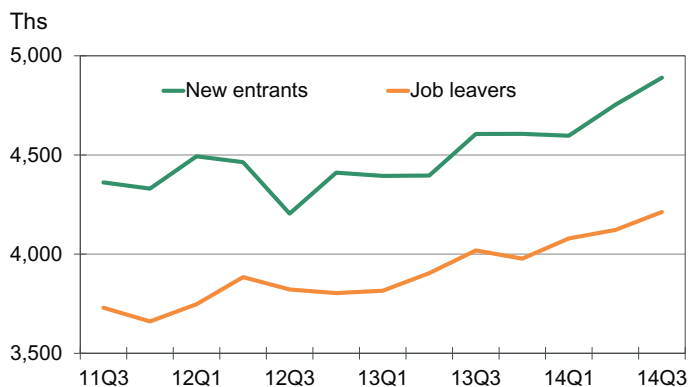
Second, the ADP hourly wage for job holders more accurately measures workers' base pay. This is unlike other BLS wage measures, which include other forms of compensation. The BLS average hourly earnings gauge includes pay for overtime hours and incentive pay (though not irregular bonuses). In 2011 and early 2012, overtime hours were increasing as was incentive pay. This supported growth in the BLS average hourly earnings metric, but not in the ADP measure. Indeed, ADP hourly wage growth lagged BLS hourly earnings growth during this period.

During the past two years, overtime hours and incentive pay have leveled off, weighing on the BLS hourly earnings growth gauge, but not on ADP's base hourly wages measure. This effect should wear off soon, however, and stronger growth in base pay, which is evident in the ADP data, should appear as well in the BLS data.

The increase in personal income tax rates at the start of 2013 also affected the timing of some workers' income. Businesses moved income into 2012 to benefit from the lower tax rate, reducing income afterward. This likely had a bigger impact on the BLS measures of labor compensation than on ADP's base wage rates for job holders. Yet this impact too should also fade quickly.

Third, the significant increase in the number of job leavers and new entrants since early 2013 may also be weighing more heavily on BLS wage measures. In the third quarter of this year, there were approximately 400,000 more job leavers and 500,000 more new entrants than in the first quarter of 2013 (see Chart 3). Since new

**Chart 3: More Entrants and Leavers Since 2013**



Sources: ADP, Moody's Analytics

entrants are paid less than those at the ends of their careers (a large share of the leavers), measured wage growth has been depressed. While this also affects growth in ADP's hourly wages for job holders, it does so later than it affects the BLS wage measure.

**Implications**

If the acceleration in ADP hourly wages presages an imminent acceleration in broader measures of labor compensation, the implications are substantial. Most encouragingly, it signals that workers will

finally participate more equitably in the benefits of the economic recovery. To date, these benefits have gone mostly to businesses and their stakeholders, driving the corporate profit share of national income to near record highs. Workers' share of national income has declined. Wages have kept pace with inflation but not with workers' productivity. If the message in the ADP data is correct, this will soon change: Workers' share of the economic pie will stabilize and may even increase.

This should be a plus for consumer spending and housing demand. Perceptions about the economy may also finally improve. The change will come too late to affect the outcome of the midterm elections, but could matter a lot for the 2016 presidential election.

It also has significant potential implications for monetary policy. Key Fed officials continue to affirm that substantial labor market slack means wage and price pressures are a long way off. Thus, the first hike in short-term interest rates is not likely until mid-2015. Sticking to this will be more difficult if aggregate wage growth picks up substantially sooner. The ADP hourly wage data suggest there is a good chance it might.

Moody's Analytics has not changed its outlook for the economy and monetary policy in response to ADP's hourly wage data. The historical time series is short and there is no track record of its ability to presage labor compensation more broadly. We still expect the Fed to begin raising rates in June and to normalize short-term rates by late 2017. However, the risk that the Fed may need to move sooner and tighten faster seems much more pronounced with the release of these new data.

We will continue to study the ADP hourly wage data, along with other labor market metrics available from the new dataset. Prospects for understanding the complex dynamics of the labor market should be substantially improved.

## ANALYSIS » Have We Underestimated U.S. Wage Growth?

### Job Holder Hourly Wage

% change yr ago

		2012Q2	2012Q3	2012Q4	2013Q1	2013Q2	2013Q3	2013Q4	2014Q1	2014Q2	2014Q3
U.S.		0.25	0.46	0.88	1.98	2.95	3.51	3.85	4.13	4.63	4.53
Region	West	0.24	0.46	0.83	1.97	2.98	3.59	3.99	4.26	4.78	4.65
	South	0.25	0.45	0.85	1.96	2.93	3.50	3.88	4.15	4.66	4.55
	Northeast	0.27	0.44	0.91	1.92	2.76	3.37	3.62	4.03	4.59	4.48
	Midwest	0.24	0.51	0.96	2.08	3.14	3.58	3.87	4.06	4.47	4.40
Industry	Financial services	0.27	0.45	1.05	2.42	3.34	3.82	3.91	4.40	4.95	4.88
	Construction	0.23	0.43	0.88	1.88	3.01	3.76	4.25	4.66	5.19	4.80
	Trade	0.26	0.49	0.83	1.92	2.95	3.48	3.95	4.17	4.71	4.62
	Professional services	0.23	0.43	0.97	2.10	3.09	3.60	3.80	4.21	4.69	4.61
	Other	0.19	0.40	0.88	1.84	2.71	3.45	3.82	4.32	4.86	4.57
	Manufacturing	0.21	0.43	0.80	2.13	3.18	3.60	3.90	3.87	4.34	4.32
	Leisure & hospitality	0.58	0.70	0.97	1.79	2.53	3.04	3.44	3.74	4.32	4.21
Healthcare & education	0.21	0.45	0.74	1.53	2.41	3.18	3.70	3.91	4.35	4.20	
Gender	Female	0.23	0.45	0.84	1.89	2.83	3.43	3.81	4.06	4.54	4.45
	Male	0.26	0.47	0.91	2.04	3.02	3.56	3.87	4.17	4.68	4.57
F/P time	Part time	0.33	0.55	0.86	1.74	2.72	3.39	3.90	4.10	4.59	4.24
	Full time	0.25	0.45	0.88	2.00	2.97	3.52	3.84	4.13	4.64	4.55
Age	16-24	0.39	0.73	1.17	2.55	4.09	5.09	6.04	6.43	6.96	6.17
	25-34	0.34	0.63	1.18	2.65	4.01	4.85	5.40	5.80	6.27	5.84
	35-54	0.24	0.43	0.82	1.90	2.82	3.32	3.61	3.88	4.39	4.42
	55 and above	0.19	0.34	0.69	1.51	2.19	2.56	2.74	2.95	3.48	3.49
Wage tier	Less than 20k	0.32	0.59	0.91	1.91	3.00	3.93	4.78	5.24	5.90	5.32
	20k-50k	0.25	0.51	0.86	1.95	3.04	3.73	4.29	4.52	5.00	4.83
	50k-75k	0.24	0.43	0.82	1.86	2.86	3.40	3.71	3.93	4.38	4.32
	75k and above	0.24	0.42	0.92	2.09	2.92	3.32	3.43	3.75	4.27	4.27
Tenure	1-3 yrs	0.30	0.55	1.00	2.30	3.49	4.28	4.83	5.17	5.69	5.38
	3-5 yrs	0.27	0.50	0.97	2.26	3.37	4.02	4.43	4.77	5.26	5.09
	5-10 yrs	0.23	0.43	0.88	2.01	3.00	3.53	3.80	4.10	4.56	4.57
	Less than 1 yr	0.29	0.53	0.85	1.78	2.70	3.30	3.87	4.16	4.77	4.51
	10 yrs and above	0.20	0.37	0.78	1.71	2.49	2.89	3.04	3.28	3.77	3.82
Company size	Below 50	0.18	0.34	0.80	1.51	2.09	2.83	3.28	4.14	5.05	4.85
	50-499	0.24	0.46	0.96	2.19	3.29	3.83	4.08	4.28	4.66	4.58
	500-999	0.27	0.49	0.90	2.13	3.20	3.71	4.04	4.11	4.47	4.30
	1,000 and above	0.32	0.54	0.84	2.00	3.06	3.53	3.90	3.92	4.33	4.28

Sources: ADP, Moody's Analytics

# About the Author

## Mark Zandi

Mark M. Zandi is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005.

Dr. Zandi's broad research interests encompass macroeconomics, financial markets and public policy. His recent research has focused on mortgage finance reform and the determinants of mortgage foreclosure and personal bankruptcy. He has analyzed the economic impact of various tax and government spending policies and assessed the appropriate monetary policy response to bubbles in asset markets.

A trusted adviser to policymakers and an influential source of economic analysis for businesses, journalists and the public, Dr. Zandi frequently testifies before Congress on topics including the economic outlook, the nation's daunting fiscal challenges, the merits of fiscal stimulus, financial regulatory reform, and foreclosure mitigation.

Dr. Zandi conducts regular briefings on the economy for corporate boards, trade associations and policymakers at all levels. He is on the board of directors of MGIC, the nation's largest private mortgage insurance company, and The Reinvestment Fund, a large CDFI that makes investments in disadvantaged neighborhoods. He is often quoted in national and global publications and interviewed by major news media outlets, and is a frequent guest on CNBC, NPR, Meet the Press, CNN, and various other national networks and news programs.

Dr. Zandi is the author of *Paying the Price: Ending the Great Recession and Beginning a New American Century*, which provides an assessment of the monetary and fiscal policy response to the Great Recession. His other book, *Financial Shock: A 360° Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis*, is described by the New York Times as the "clearest guide" to the financial crisis.

Dr. Zandi earned his BS from the Wharton School at the University of Pennsylvania and his PhD at the University of Pennsylvania. He lives with his wife and three children in the suburbs of Philadelphia.

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Moody's Analytics added Economy.com to its portfolio in 2005. Now called Economic & Consumer Credit Analytics, this arm is based in West Chester PA, a suburb of Philadelphia, with offices in London, Prague and Sydney. More information is available at [www.economy.com](http://www.economy.com).

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