

## **Why the Bureau of Labor Statistics Employment Numbers Are Wrong Every Time.**

The Bureau of Labor Statistics (BLS) establishment survey is the most comprehensive analysis of employment produced by the U.S. government. When the preliminary results are released each month, they often trigger significant movements in global stock and bond markets. Yet the preliminary results suffer from five serious shortcomings:

1. Changes in employment in the service sector are not fully captured.
2. Heavy seasonal adjustments often obscure trends in employment.
3. Employment growth at smaller companies and growth in self-employment are not fully captured.
4. The company “birth/death” adjustments are nothing more than educated guesses.
5. Only 60% of the survey for the latest month is complete.

A year later, the BLS corrects most of these shortcomings by benchmarking the preliminary results to actual payroll data. By that time, however, the benchmarked results are not relevant to current macroeconomic conditions.

We believe the inaccurate preliminary results of the BLS establishment survey have a negative impact on the U.S. economy. When the popular press trumpets them as gospel truth each month, it creates unnecessary fear about the direction of the U.S. economy. We believe this fear adversely impacts investment decisions and may even limit overall economic growth.

### *BLS Establishment Survey Does Not Reflect Dominance of Service Sector in U.S. Economy.*

The most serious flaw in the BLS establishment survey is that it does not fully capture changes in employment in the service sector. The BLS survey methodology was developed when the U.S. economy was primarily a manufacturing economy. As U.S. businesses began to move manufacturing offshore in the 1990s in response to lower overseas labor costs and plummeting telecommunications costs, the U.S. economy rapidly shifted from a manufacturing-based economy to a service-based economy. While the BLS establishment survey elicits responses from about 370,000 establishments, most respondents are government employers or manufacturing employers. The table on page 4 summarizes the BLS establishment survey response distribution.

As the table shows, 70.4% of government employees are represented in the survey even though government employment represents only 16.8% of U.S. employment. In addition, the survey relies heavily on responses from the transportation, utilities, and manufacturing industries even though the U.S. economy is a service-based economy. The BLS adjusts its survey statistically to reflect the composition of U.S. businesses, but its adjustments have been unreliable.

Industry	Actual Industry Totals		BLS Establishment Survey Sample Totals			
	Actual Industry Totals (Thousands)	% of Total	Number of Establishments in Sample	Number of Employees in Sample (thousands)	Percent of Actual Industry Employment Levels (%)	% of Sample
Total	132,038	100.0%	369,162	40,838	30.9%	100.0%
Natural Resources and Mining	602	0.5%	2,488	163	27.1%	0.4%
Construction	6,838	5.2%	14,021	664	9.7%	1.6%
Manufacturing	14,200	10.8%	19,842	4,268	30.1%	10.5%
Trade, Transportation, and Utilities	25,501	19.3%	109,982	6,780	26.6%	16.6%
Information	3,056	2.3%	13,111	846	27.7%	2.1%
Financial Activities	8,063	6.1%	47,216	1,602	19.9%	3.9%
Professional and Business Services	16,540	12.5%	76,278	3,150	19.0%	7.7%
Education and Health Services	17,355	13.1%	34,601	5,232	30.1%	12.8%
Leisure and Hospitality	12,365	9.4%	38,542	2,223	18.0%	5.4%
Other Services	5,372	4.1%	10,792	331	6.2%	0.8%
Government	22,146	16.8%	36,978	15,580	70.4%	38.2%

Source: Bureau of Labor Statistics – [www.bls.gov](http://www.bls.gov)

*Huge BLS Seasonal Adjustments Frequently Obscure Changes in Employment.*

To adjust for seasonal fluctuations in the labor market, the BLS applies seasonal adjustments to its data. The size of these seasonal adjustments varies from month to month, but seasonal adjustments are large in November, December, January, and February because large numbers of seasonal workers are added and then removed from payrolls during the holiday season. Seasonal adjustments are also massive in June and July because large numbers of teachers and automotive workers temporarily leave the work force. The BLS establishment surveys in January and July typically need to account for employment losses numbering in the millions even though employment gains or losses are measured in hundreds of thousands of jobs. Therefore, employment trends are lost in the statistical noise of the data.

*Large Corporation Bias Reduces Employment Growth BLS Reports.*

A significant bias toward large corporations reduces the employment growth measured by the BLS establishment survey. While most of the roughly 370,000 respondents to the BLS establishment survey are large corporations and government employers, the Small Business Administration (SBA) reports that firms with fewer than 500 employees contribute 50.0% of U.S. non-farm economic output and 49.9% of U.S. employment. The SBA also reports that small businesses were responsible for most of the economic expansion during the past three years. Not only are small businesses underrepresented in the BLS establishment survey, self-employed individuals are not counted at all. According to the SBA, there are about 15 million self-employed workers in the U.S., and self-employment increased 8.2% from 1995 through 2003. By undercounting small

businesses and ignoring self-employment, the BLS establishment survey has missed the biggest sources of employment growth since 2000.

*BLS Company “Birth/Death” Adjustments Are Nothing More Than Educated Guesses.*

Each month, the BLS applies “birth/death” adjustments to its employment data to account for jobs created by new businesses and jobs lost due to business closings. The BLS explains these “birth/death adjustments” on its Web site (<http://www.bls.gov/news.release/empsit.tn.htm>):

Another major source of nonsampling error in the establishment survey is the inability to capture, on a timely basis, employment generated by new firms. To correct for this systematic underestimation of employment growth, an estimation procedure with two components is used to account for business births. The first component uses business deaths to impute employment for business births. This is incorporated into the sample-based link relative estimate procedure by simply not reflecting sample units going out of business, but imputing to them the same trend as the other firms in the sample. The second component is an ARIMA time series model designed to estimate the residual net birth/death employment not accounted for by the imputation. The historical time series used to create and test the ARIMA model was derived from the unemployment insurance universe micro-level database, and reflects the actual residual net of births and deaths over the past five years.

According to a reliable official source familiar with BLS methodology, the BLS estimate of business deaths is based on data that is at least one year old and sometimes two years old. This source also reports that the BLS estimate is nothing more than an educated guess.

*Only 60% of BLS Establishment Survey Complete at Time of Initial Release of Employment Data.*

The BLS establishment survey covers employment from the thirteenth day of one month to the twelfth day of the following month. Therefore, only 60% of the establishment survey is complete by the time the BLS releases its initial estimates of employment growth. According to a reliable official source, the early responders are typically government employers, so the initial results are heavily weighted toward trends in government employment. Also, the BLS instituted a Web-based reporting system last summer. While all government employers were required to adopt this method of reporting, private employers have been slower to follow, which means the initial results are even more weighted toward government employers.

*BLS Benchmark Revisions for April 2005 through March 2006 Boost Employment Growth by Whopping 752,000 Jobs.*

If one has any doubt about the inaccuracy of the BLS establishment survey, one need only consider the benchmark revisions to the BLS employment data released in early February 2007. These benchmark revisions added a whopping 752,000 jobs to the BLS initial estimates of employment growth from April 2005 through March 2006. Using these benchmark revisions, the BLS upwardly revised employment growth in 2006 by 723,000 jobs. Since the BLS initial estimate of employment growth in 2006 was 1.52 million jobs, the BLS underestimated job growth by a whopping 48% in 2006. TrimTabs' estimates of employment growth in 2006 using real-time and near real-time indicators totaled 2.4 million jobs, which is much closer to the BLS benchmark estimates.

The table below compares TrimTabs employment growth estimates for 2006 to initial BLS employment growth estimates and subsequent benchmarked BLS employment growth estimates.

<b>Month</b>	<b>TrimTabs Estimates of Employment Growth (in thousands)</b>	<b>BLS Initial Estimates of Employment Growth (in thousands)</b>	<b>BLS Benchmarked Estimates of Employment Growth (in thousands)</b>	<b>Difference between TrimTabs Estimates and BLS Benchmarked Estimates (in thousands)</b>
Jan-06	200	154	206	-6
Feb-06	292	200	300	-8
Mar-06	257	175	249	8
Apr-06	215	112	144	71
May-06	196	75	103	93
Jun-06	168	121	124	44
Jul-06	145	113	222	-77
Aug-06	175	128	186	-11
Sep-06	175	51	198	-23
Oct-06	154	92	109	45
Nov-06	234	132	196	38
Dec-06	181	167	206	-25
<b>Total</b>	<b>2,392</b>	<b>1,520</b>	<b>2,243</b>	<b>149</b>

Source: U.S. Bureau of Labor Statistics – [www.bls.gov](http://www.bls.gov) and TrimTabs Investment Research – [www.trimtabs.com](http://www.trimtabs.com)