



National Employment Report

Statistical, Methodological, and Presentational Revisions
to the *ADP National Employment Report*

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Outline of the Presentation

- Key messages
- Summary of revisions to the *ADP National Employment Report*
- New format of *The Report*
- Statistical summary
- Available resources



National Employment Report

Key Messages



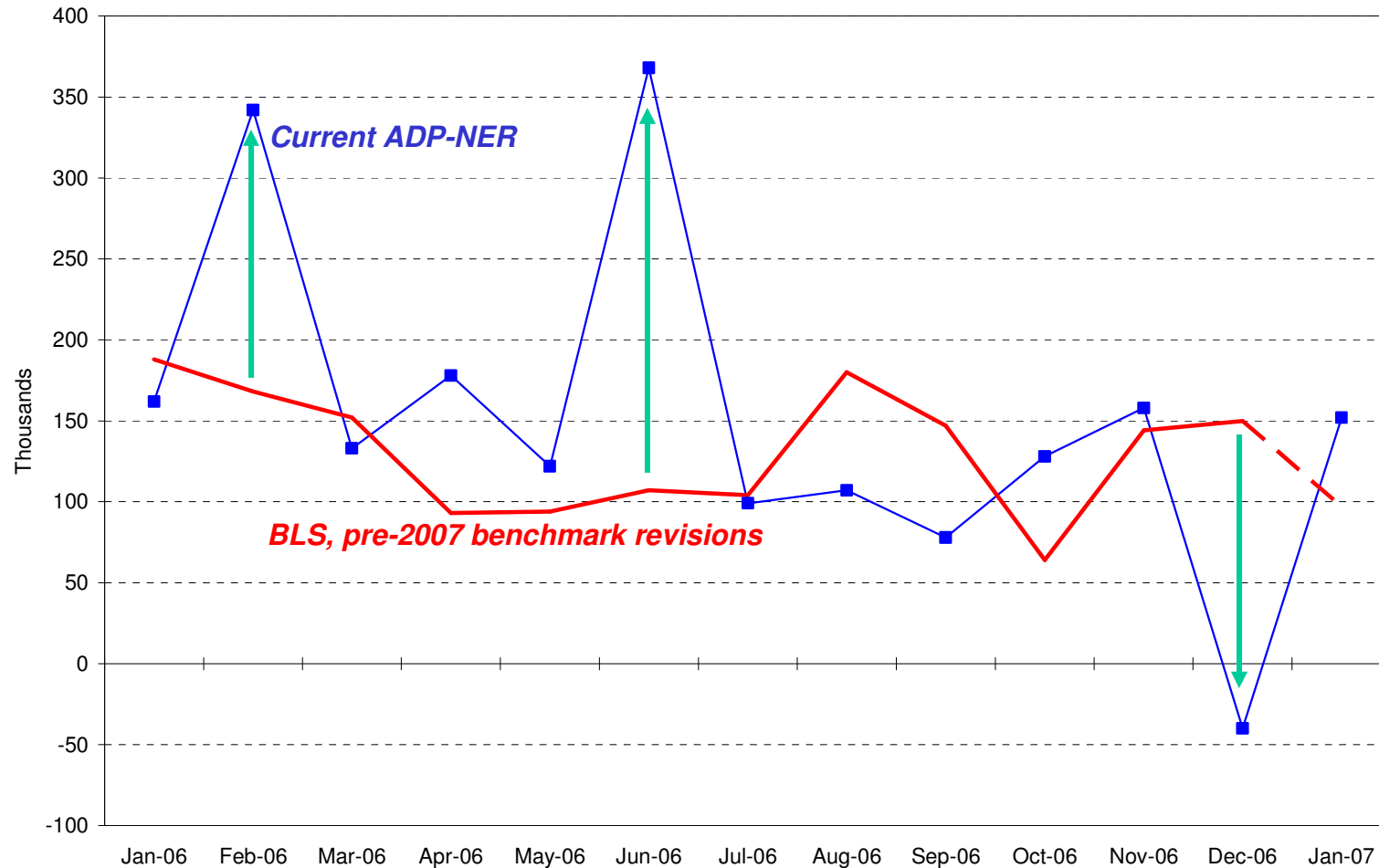
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The ADP National Employment Report merits continued close attention, especially after implementation of statistical / methodological revisions...

- Use ADP data to form the best, earliest estimate of the *true* monthly change of PNF employment
- Improved statistical procedures / methodologies have enhanced the correspondence between *The Report* and the current BLS data
- We expect this also to improve the performance of the *ADP National Employment Report* in real time, including fewer outliers
- The *ADP National Employment Report* will show new detail by select industries and by size of payrolls

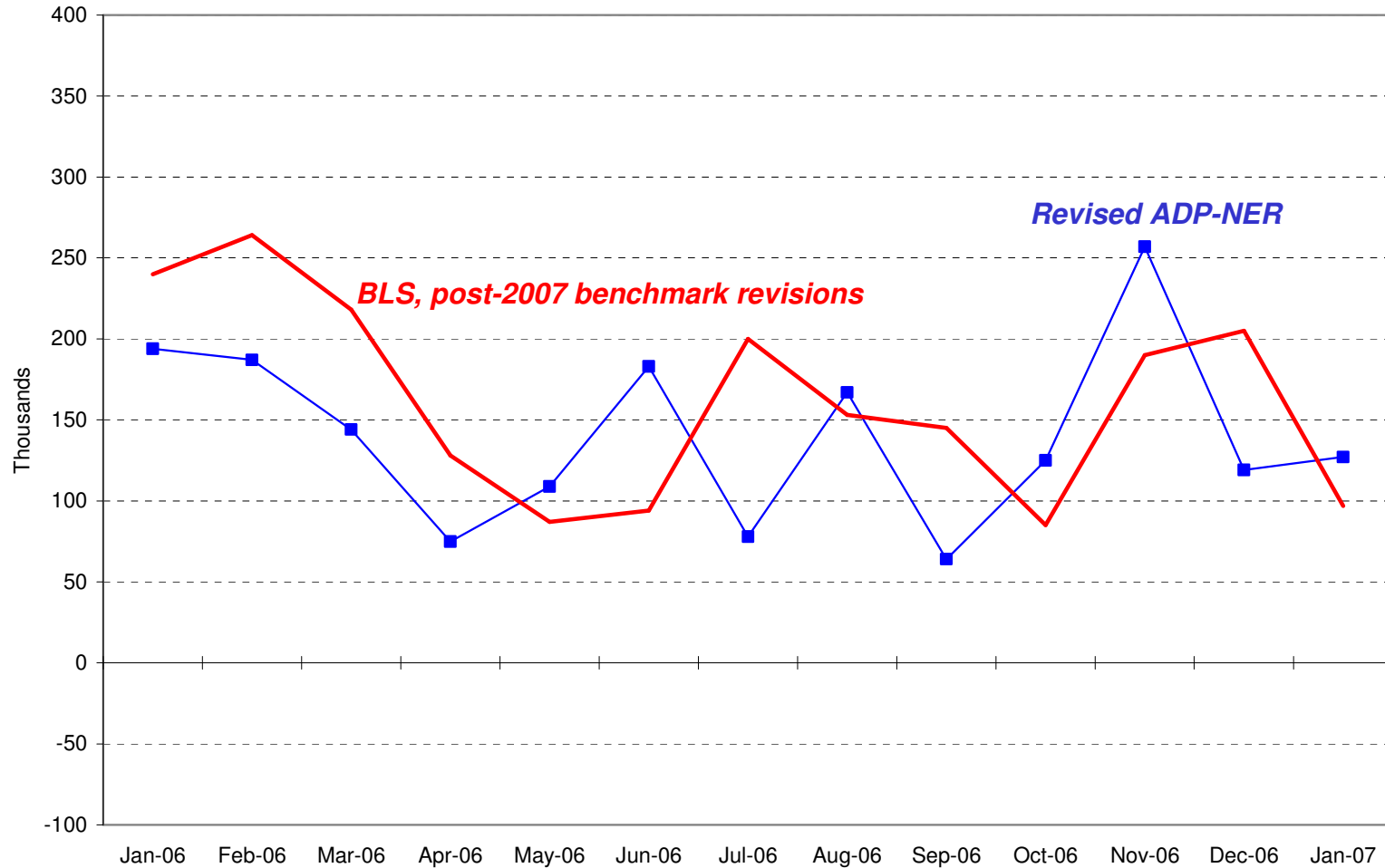
The current ADP National Employment Report showed large deviations from BLS pre-revised estimates in February, June, & December of 2006...

Recent Monthly Changes in Private Nonfarm Employment



Revisions to BLS data and revisions to the ADP National Employment Report have notably reduced these deviations...

Recent Monthly Changes in Private Nonfarm Employment



- Estimates of the monthly growth of employment shown in the revised ADP-NER have been on the "right" side of the BB consensus 70% of the time.

- So, they can be used systematically to improve upon the consensus forecasts of BLS estimates.

- The relative (vs. consensus) weight to accord the ADP-NER rises with more recent vintages of BLS estimates.

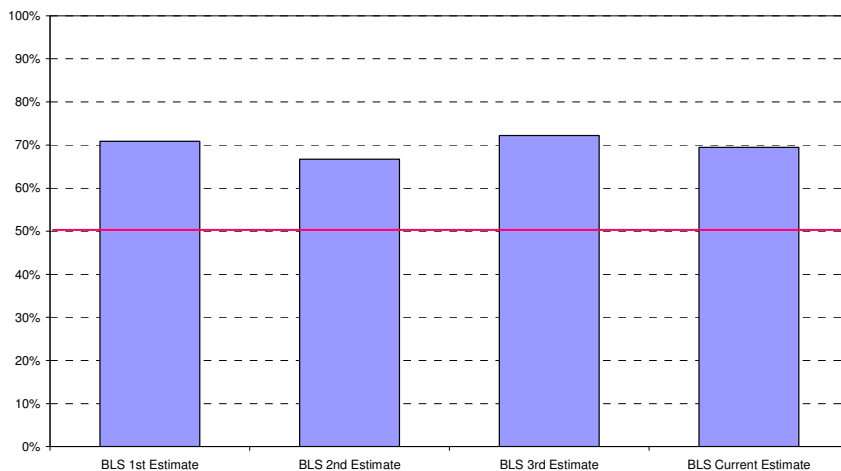
- Early vintages of BLS estimates show a trended pattern of biases that must be controlled for.

$$\dot{E}_t^{bls} - \dot{E}_t^{con} = \beta(\dot{E}_t^{adp} - \dot{E}_t^{con}) + \alpha TREND_t$$

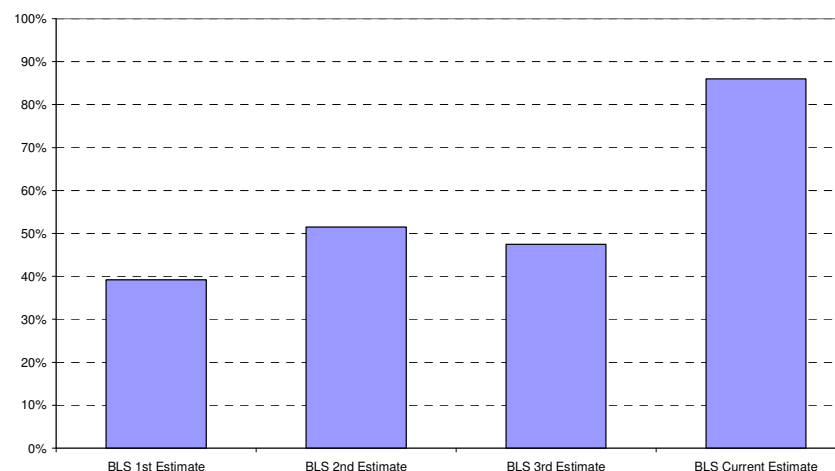
Regressions for % chg. in PNF Employment
Sample: January 2001 - January 2007

Dependent variable	ADP less consensus	TREND (Bias)	R ²
BLS 1st estimate less consensus..... <i>t</i> -statistic.....	0.392 3.9	-0.00059 2.8	0.08
BLS 2nd estimate less consensus..... <i>t</i> -statistic.....	0.515 4.7	-0.00033 1.4	0.16
BLS 3rd estimate less consensus..... <i>t</i> -statistic.....	0.475 4.2	-0.00027 1.1	0.15
BLS current estimate less consensus.. <i>t</i> -statistic.....	0.860 8.6	0.00014 0.7	0.45

Percent of Months ADP-NER has been on "Right" Side of the Bloomberg Consensus Forecast since January 2001

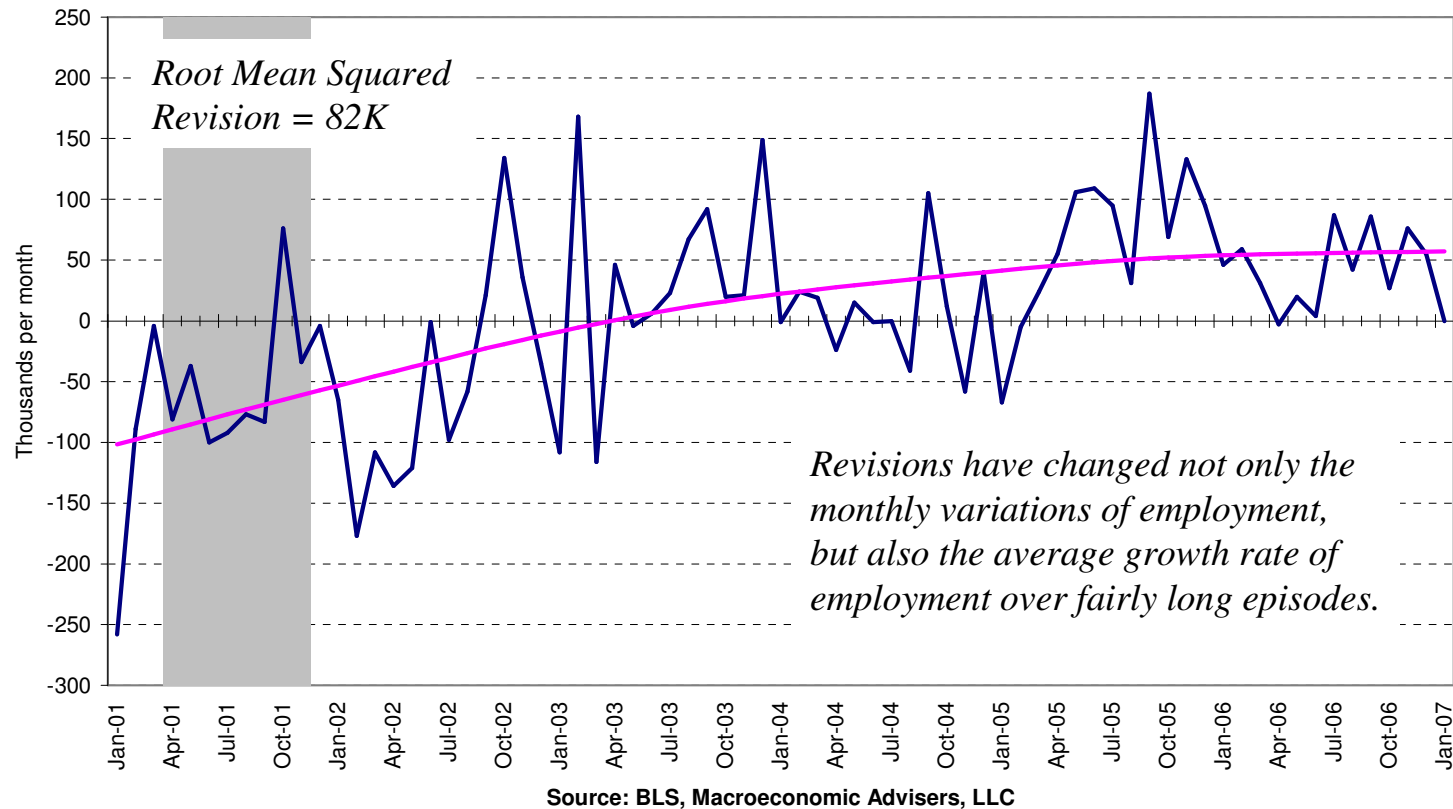


Optimal Relative Weight (vs. consensus) to have put on the ADP National Employment Report when Forecasting:



Eventual revisions to BLS estimates (current less initial) can be large and often reveal periods of persistent bias in the earlier estimates...

Revisions (Current less Initial) to BLS Estimate of Monthly Change in Private Non-farm Employment





National Employment Report

Summary of Revisions to the
ADP National Employment Report



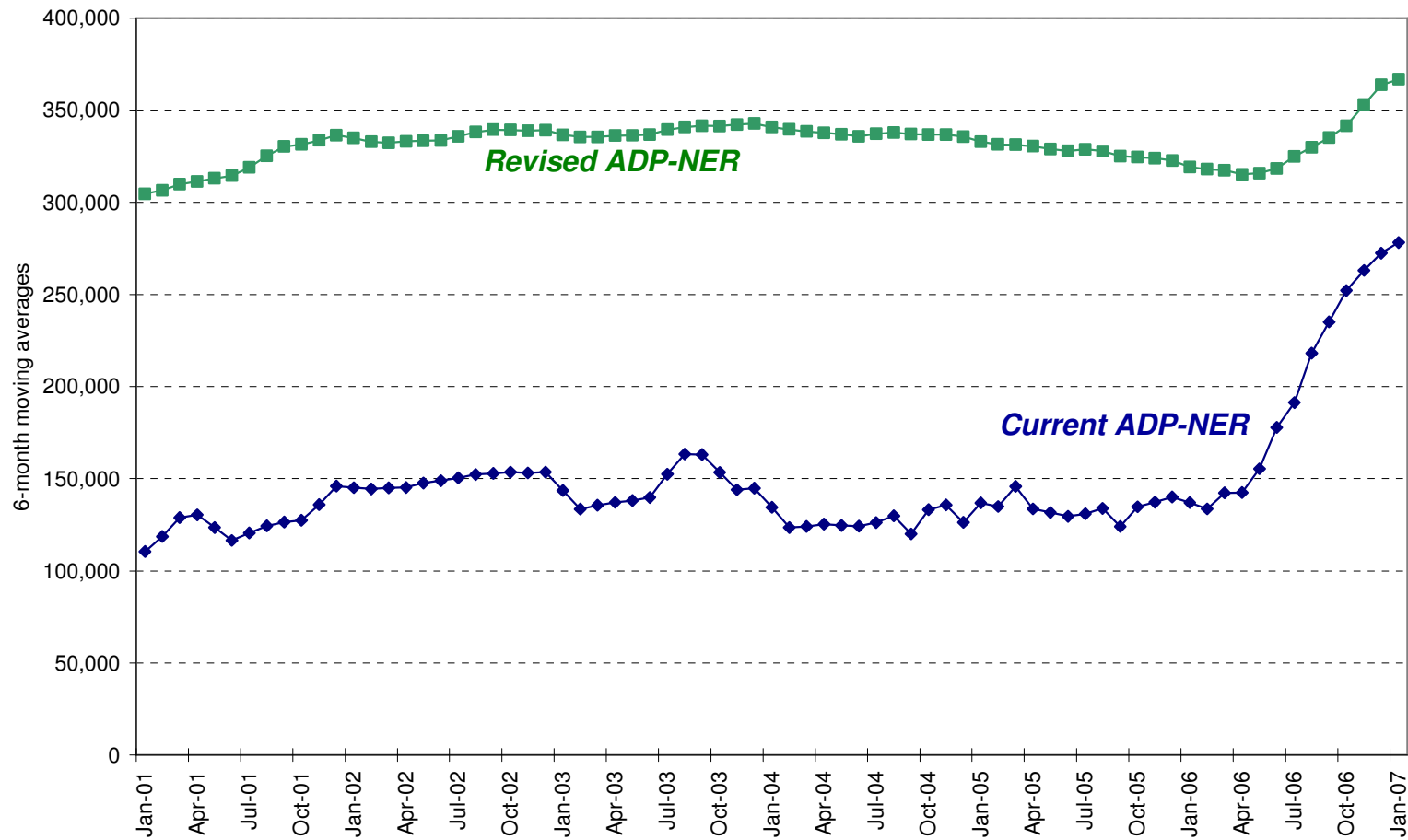
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Revisions to the *ADP National Employment Report*

STATISTICAL REVISIONS	Current Report	Revised Report
Larger Average Sample Size.....	~ 125K payrolls, 7M employees	=> 400K payrolls, 23M employees
More Frequent Data Collection.....	Every Month	Every Week
More Payrolls Included.....	Directly Aligned on 12th	Interpolations, too
Higher Rate of Industry Matching.....	75%	90%
More Frequent Industry Matching.....	Every Quarter	Every Month
Stable Sample Size, Composition.....	Volatile	Stable
Improve Coverage by Collapsing Cells.....	19 Industries, 9 sizes Replacement Data	10 Industries, 9 Sizes No Replacement Data
Better Assignment of Pay Periods.....	Informed Judgement	Inferred from Special Sample
Better Seasonal Adjustment Program.....	X-11	X-12-ARIMA
Better Handling of Long Months.....	Partial, at Industry Level	Full, at Cell Level
Improved Outlier Detection / Removal.....	Cell Grid on Controls TS Filter on Controls	XS Filter of Controls X-12-ARIMA by Cell
METHDOLOGICAL REVISIONS		
Improved Estimation Technique.....	Vary TS Filter Width	Industry Regressions
Annual Level Benchmarking.....	At Aggregate Level	No Benchmarking
Revisions	Annual	One Month, Annual
PRESENTATIONAL REVISIONS		
Make Detail Available.....	None	Goods, Mfg, Services Small, Medium, Large
Make Available Sample Characteristics.....	None	numbers of payrolls, employees
Make Available Underlying Data.....	Aggregate MSGR, SA	Cell MSGRs, SA & NSA

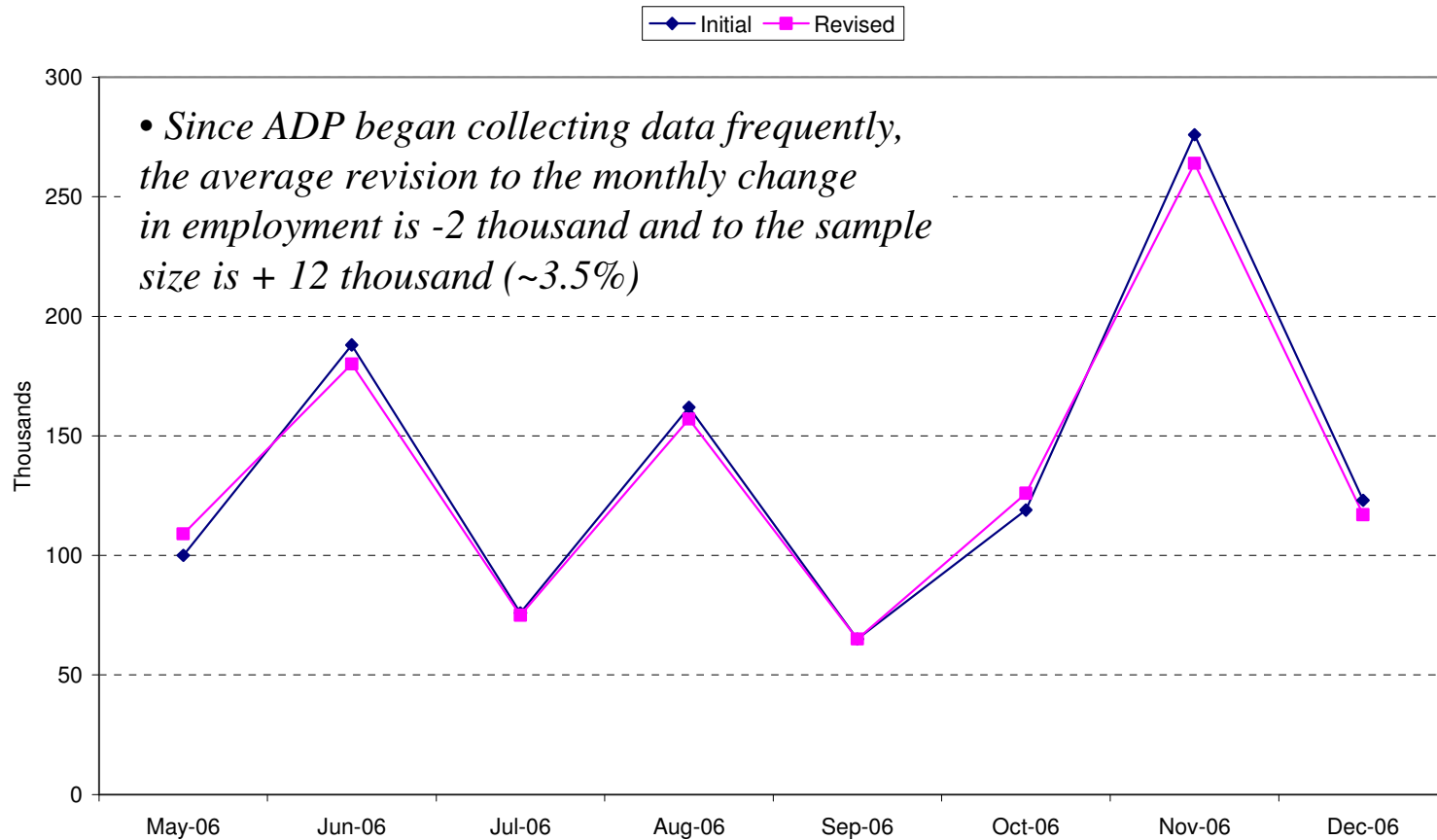
With recent improvements, the ADP sample of payrolls is now larger than the full BLS monthly sample (adjusted for average response rates)...

Count of Payrolls in the ADP National Employment Report



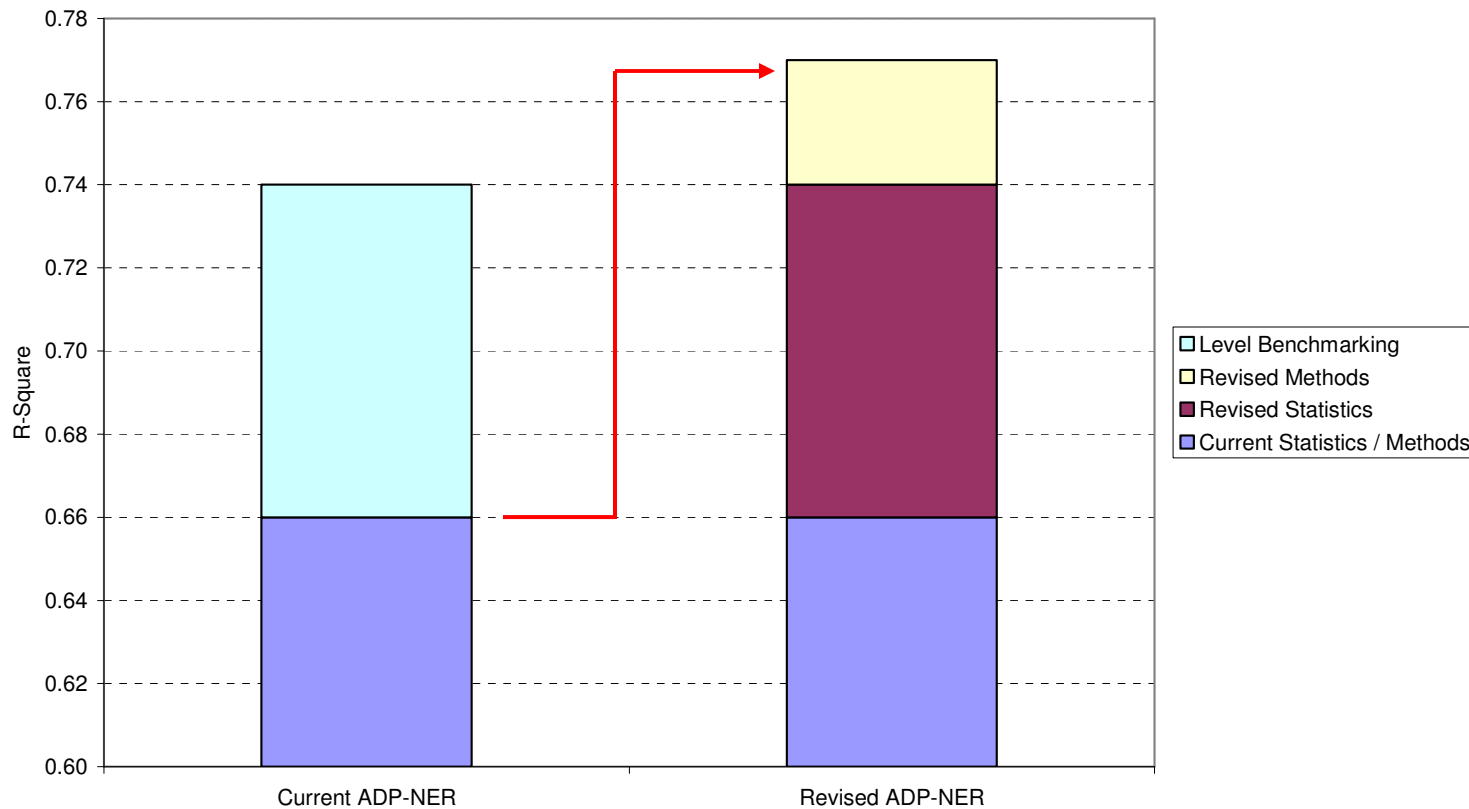
Since May of 2006, when ADP began collecting data weekly, the revisions to the previous month's estimate have been small...

Estimates of Monthly Change in Employment Shown in the *ADP National Employment Report*



Revisions to the ADP National Employment Report have improved its historical performance by 17%, without level benchmarking.....

Historical Fit of *ADP-NER* on BLS Current Estimates of Monthly Percent Change in Private Nonfarm Employment





National Employment Report

New Presentation of the
ADP National Employment Report



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Table 1a of the revised ADP National Employment Report shows employment by select industries and size of payrolls...

BASED ON ADP PAYROLL DATA

Table 1a. Employees on nonfarm private payrolls by selected industry sector and size
(In thousands)

Industry / Size of Payroll	Seasonally Adjusted						Change from: Dec. 2006 - Jan. 2007p
	Aug. 2006	Sep. 2006	Oct. 2006	Nov. 2006	Dec. 2006	Jan. 2007p	
Total nonfarm private.....	114,365	114,432	114,557	114,815	114,933	115,059	126
Small (1-49).....	49,977	50,040	50,106	50,203	50,299	50,376	77
Medium (50-499).....	44,976	45,000	45,053	45,166	45,191	45,241	50
Large (> 499).....	19,412	19,392	19,398	19,446	19,443	19,442	-1
Goods-producing.....	22,539	22,492	22,473	22,491	22,473	22,461	-12
Small (1-49).....	8,087	8,085	8,087	8,102	8,115	8,124	9
Medium (50-499).....	9,966	9,941	9,933	9,943	9,926	9,917	-9
Large (> 499).....	4,486	4,466	4,453	4,446	4,432	4,420	-12
Service-providing.....	91,826	91,940	92,084	92,324	92,460	92,598	138
Small (1-49).....	41,890	41,955	42,019	42,101	42,184	42,252	68
Medium (50-499).....	35,010	35,059	35,120	35,223	35,265	35,324	59
Large (> 499).....	14,926	14,926	14,945	15,000	15,011	15,022	11
Addendum:							
Manufacturing.....	14,165	14,133	14,118	14,117	14,095	14,074	-21

Table 1b of The ADP National Employment Report shows recent sample characteristics of the ADP monthly matched sample...

Table 1b. Selected characteristics of ADP matched sample
(6-month moving averages)

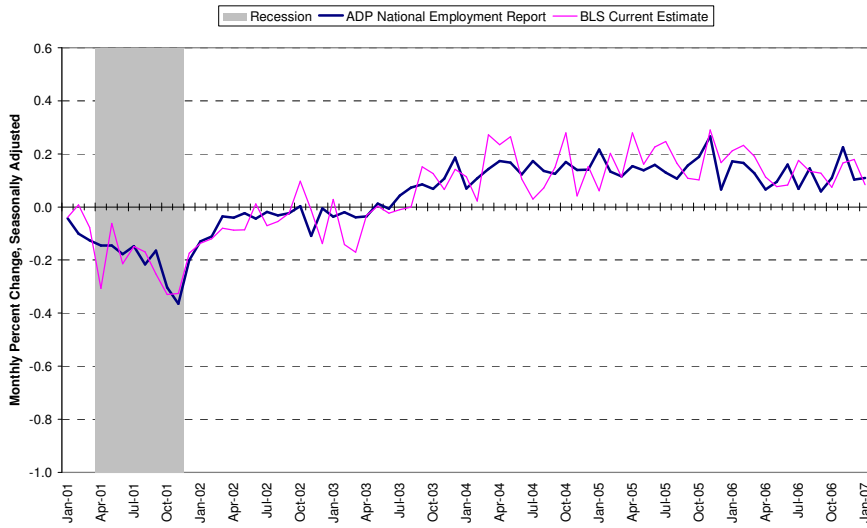
Characteristic	Aug. 2006	Sep. 2006	Oct. 2006	Nov. 2006	Dec. 2006	Jan. 2007p
Payrolls ¹	329,846	335,011	341,422	353,032	363,653	366,738
Employees (millions) ²	20.8	21.2	21.7	22.2	22.4	22.4

p = preliminary

¹ Domestic payrolls processed by ADP that, in contiguous months, have an industrial classification and are used to estimate employment for pay-periods that include the 12ths of the months. The number of payrolls in the matched sample is not a comprehensive count of ADP customers.

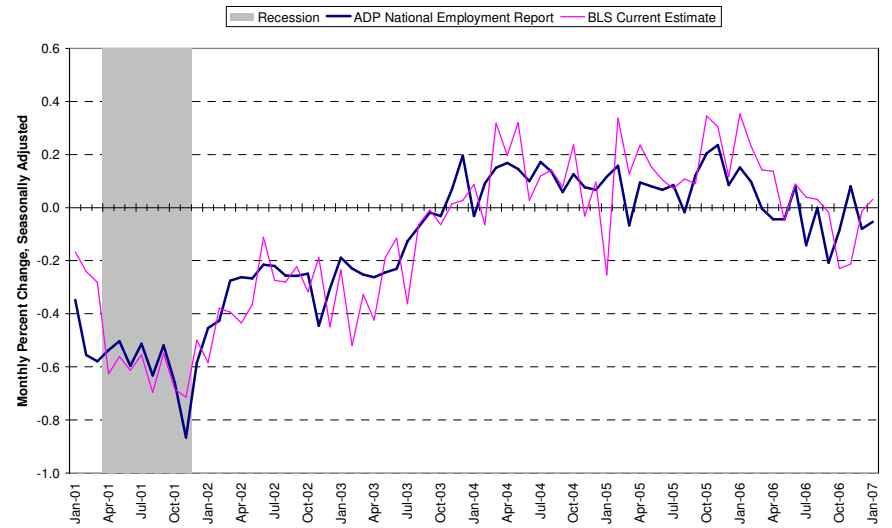
² Employees during the current month shown on an ADP payroll included in the matched sample.

Chart 1. Growth of Private Nonfarm Employment, All Industries



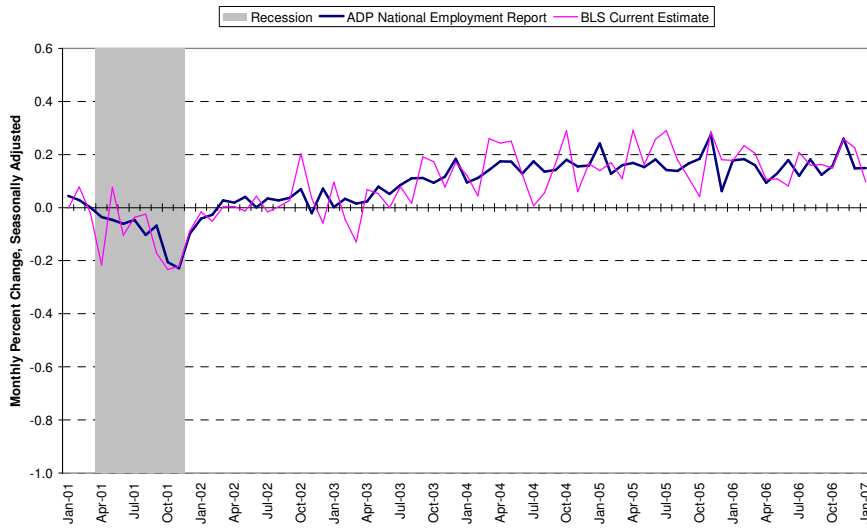
Source: Automatic Data Processing, Inc., Macroeconomic Advisers, LLC., Bureau of Labor Statistics

Chart 2. Growth of Private Nonfarm Employment, Goods-Producing Industries



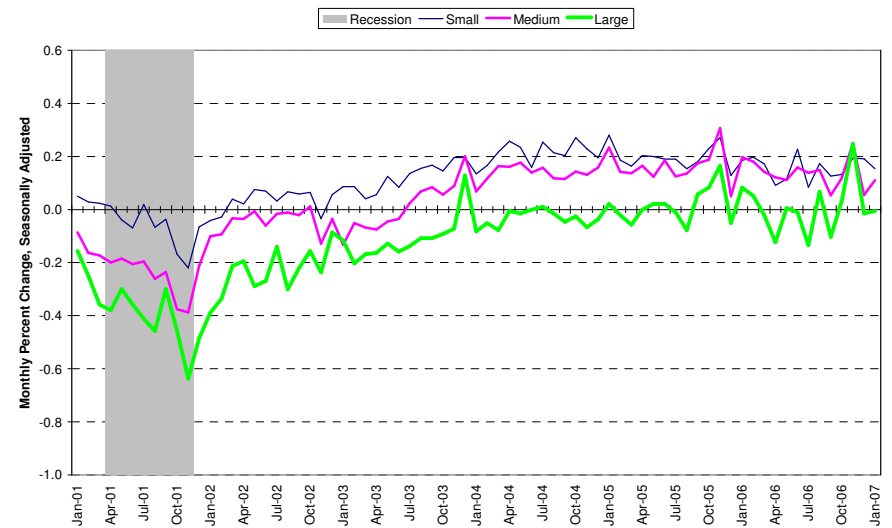
Source: Automatic Data Processing, Inc., Macroeconomic Advisers, LLC., Bureau of Labor Statistics

Chart 3. Growth of Private Nonfarm Employment, Service-Providing Industries



Source: Automatic Data Processing, Inc., Macroeconomic Advisers, LLC., Bureau of Labor Statistics

Chart 4. Growth of Private Nonfarm Employment, by Size of Payroll



Source: Automatic Data Processing, Inc., Macroeconomic Advisers, LLC.



National Employment Report

Statistical Summary



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The Report outperforms other models for the total change in employment, and contains information not in the BLS initial, second, or third estimates...

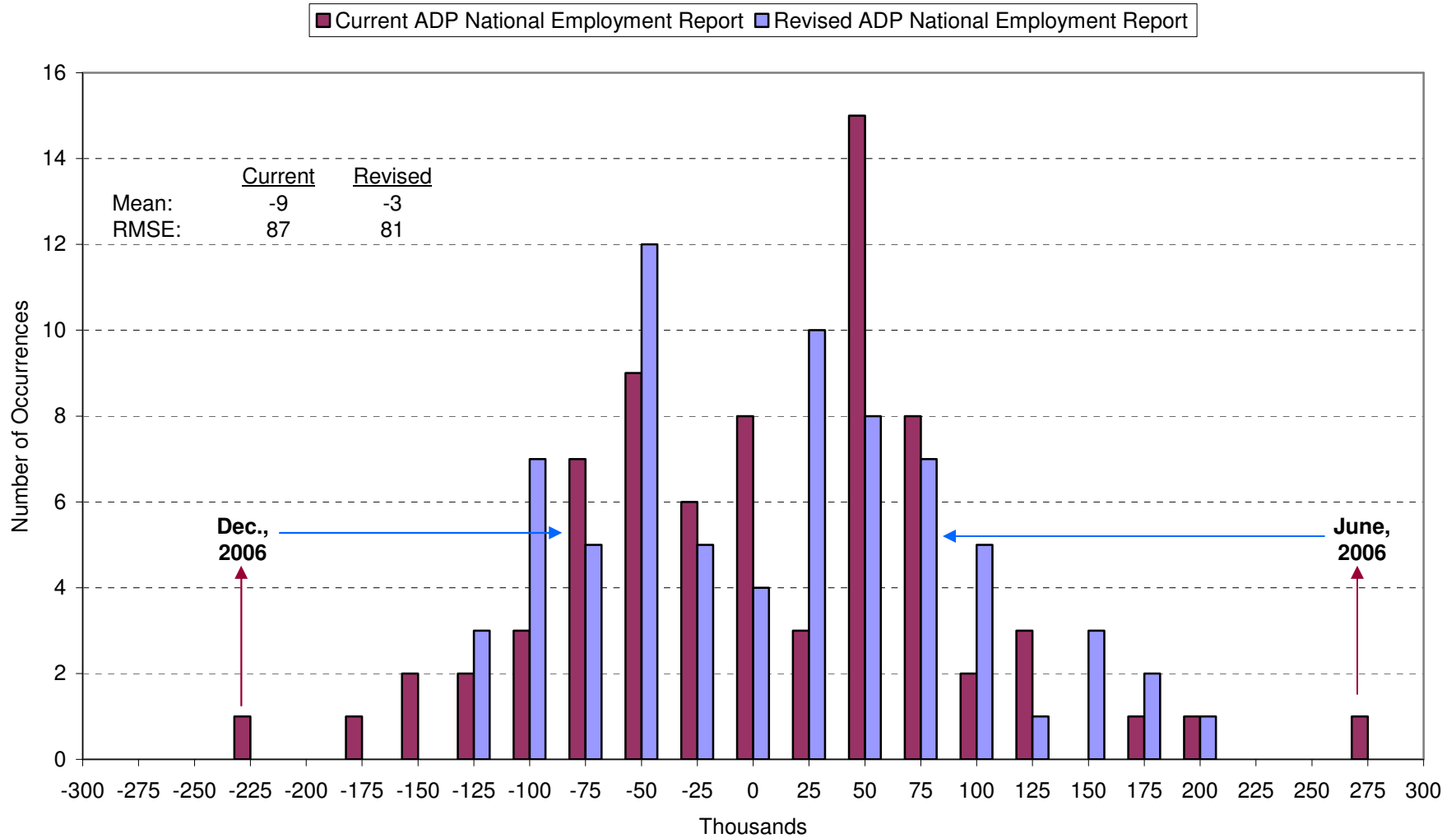
Regressions for Current Estimate of Monthly Percent Change in PNF Employment
 Sample: January 2001 - January 2007

Constant Term.....	-0.046	1.053	-0.265	0.002	0.319	-0.002	-0.002	-0.007
<i>t</i> -statistic.....	-3.2	11.7	-9.5	0.3	2.2	-0.3	-0.3	-1.0
Bloomberg Consensus #.....	1.153				-0.047			
<i>t</i> -statistic.....	10.4				-0.3			
Initial Unemployment Claims.....		-0.003			-0.001			
<i>t</i> -statistic.....		-11.3			-2.2			
Current ADP-NER (MSGR)# *			1.028					
<i>t</i> -statistic.....			11.9					
Revised ADP-NER#.....				1.016	0.531	0.581	0.505	0.554
<i>t</i> -statistic.....				15.3	3.7	7.6	6.5	7.0
BLS, Initial Estimate #.....						0.579		
<i>t</i> -statistic.....						7.6		
BLS, Second Estimate #.....							0.603	
<i>t</i> -statistic.....							8.3	
BLS, Third Estimate #.....								0.555
<i>t</i> -statistic.....								7.5
R-Squared.....	0.603	0.643	0.664	0.767	0.818	0.872	0.884	0.872
Standard Error of Regression.....	0.097	0.092	0.089	0.074	0.067	0.055	0.053	0.056

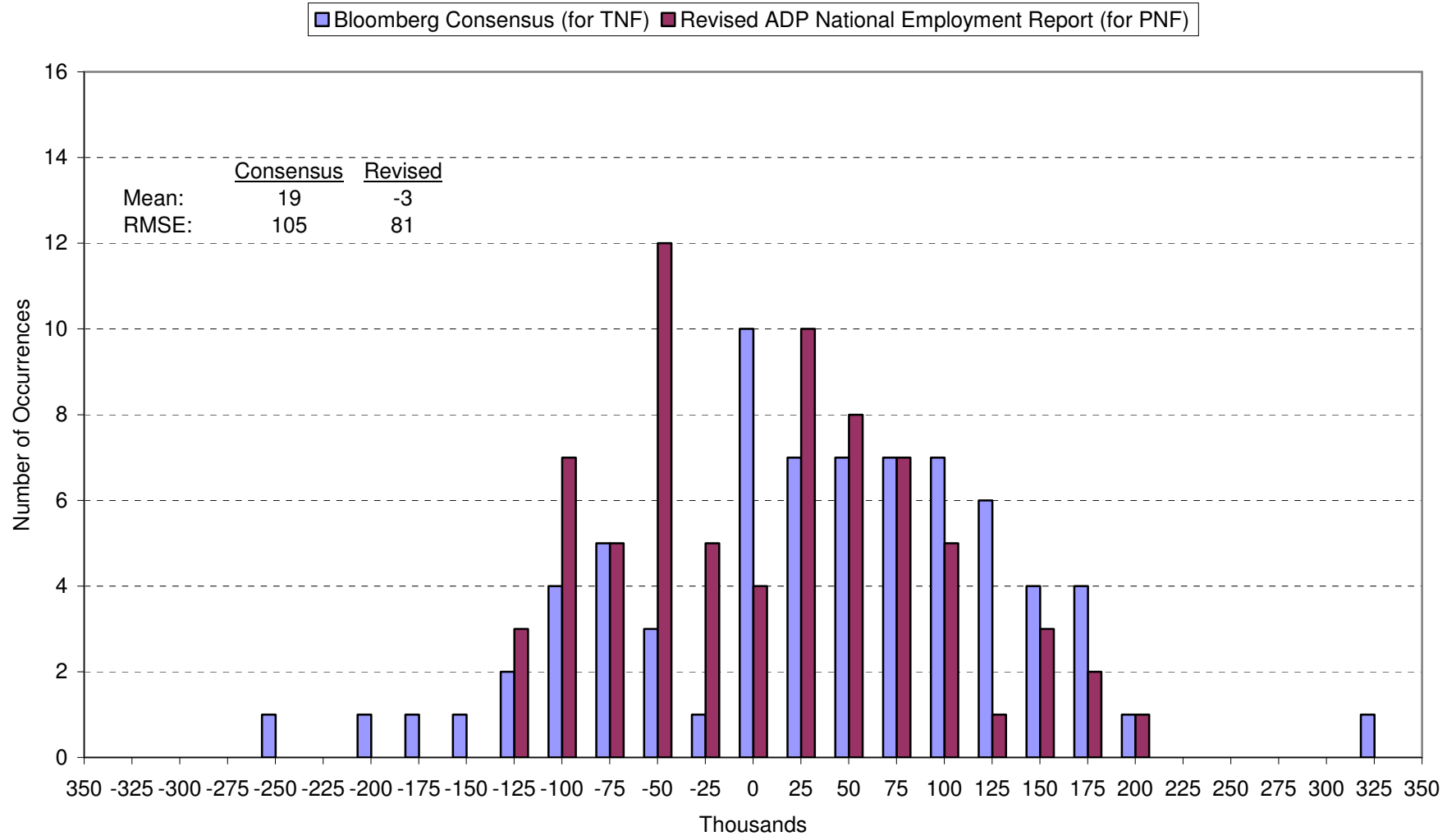
Expressed as monthly percent change

* Without level benchmarking

Distribution of Forecast Errors for Current Estimate of Monthly Change in PNF Employment, January 2001 - January 2007



Distribution of Forecast Errors for Current Estimate of Monthly Change in Employment, January 2001 - January 2007



Historically, the Revised ADP National Employment Report also outperforms other regression models for growth of employment by industry.....

Regressions for Current Estimate of Monthly Percent Change in PNF Employment, by Select Industry
 Sample: January 2001 - January 2007

	Total	Goods	Services			Manufacturing		
Constant Term.....	0.002	0.013	-0.002	-1.051	-0.418	-0.001	-2.289	-0.689
<i>t</i> -statistic.....	0.3	0.7	-0.2	-8.6	-2.7	0.0	-18.5	-2.4
Revised ADP-NER, Percent Change #...	1.016	0.984	1.023		0.738	0.953		0.695
<i>t</i> -statistic.....	15.3	15.7	11.4		5.4	20.2		6.0
ISM Diffusion Index - Employment #....				0.022	0.009		0.041	0.013
<i>t</i> -statistic.....				9.3	2.7		16.5	2.4
R-Squared.....	0.767	0.776	0.647	0.548	0.680	0.852	0.793	0.863
Standard Error of Regression.....	0.074	0.139	0.075	0.085	0.072	0.118	0.139	0.114

by industry



National Employment Report

Available Resources



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The following resources can help you better understand the ADP National Employment Report...

- *Statistical, Methodological, and Presentational Revisions to the ADP National Employment Report (February 22, 2007)*
- *The ADP National Employment Report: Methods and Properties (Forthcoming, 2007)*
- *ADP's National Employment Report (February 22, 2007)*
- Revised and new historical series, 2001 to present, for all variables appearing in Tables 1a and 1b of the revised monthly press release
- Matched-sample growth rates by cell (10 industries, 9 sizes), 2001 to present, before and after seasonal adjustment
- www.adpemploymentreport.com