

# Ceridian-UCLA Pulse of Commerce Index™

By UCLA Anderson School of Management

April 12, 2011



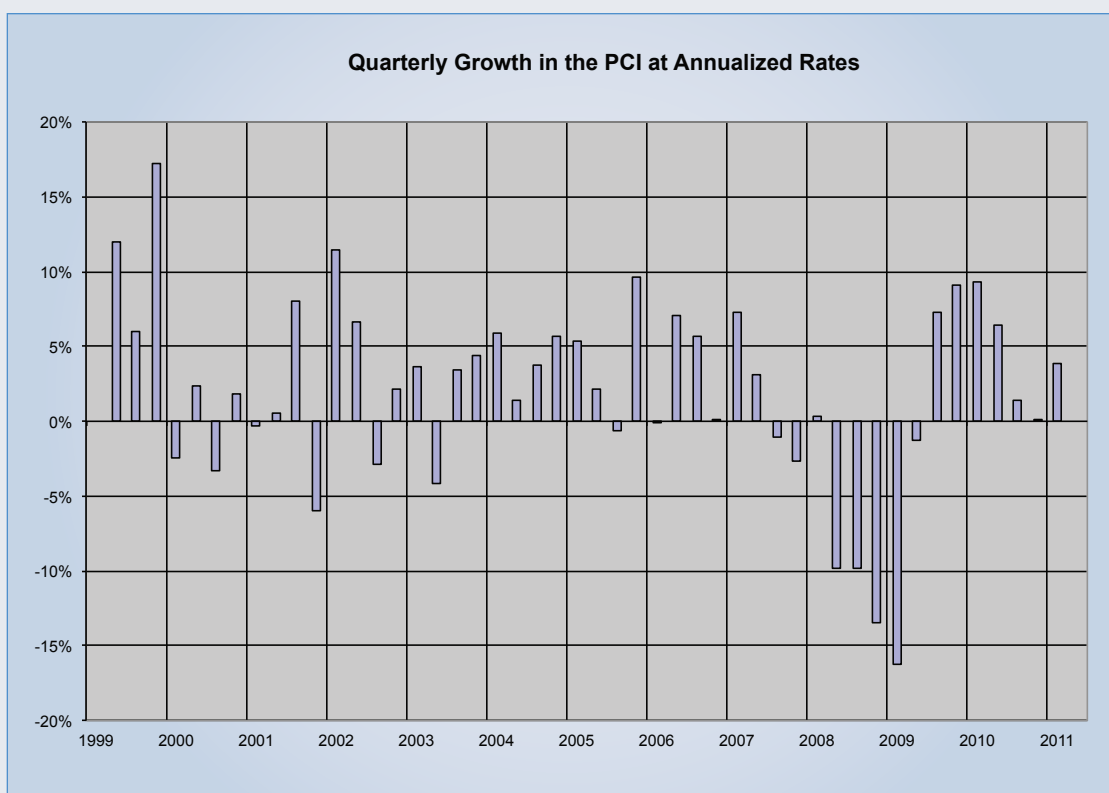
**UCLAAnderson**  
School of Management

## Pulse of Commerce Index Jumps 2.7% in March March result more than offsets earlier weakness in Q1

### Economic recovery continues — Index posts 16th straight month of year-over-year growth

### On track for a good, but not great, GDP release for Q1 2011

The Ceridian-UCLA Pulse of Commerce Index™ (PCI), issued today by the UCLA Anderson School of Management and Ceridian Corporation rose 2.7% on a seasonally and workday adjusted basis in March, more than offsetting the 0.3% decline in January and the 1.5% decline in February. On a quarter over quarter basis, the PCI is up 3.9% at an annualized rate, a welcome acceleration from the weak growth of the PCI in the 3rd and 4th quarter of 2010. It's better, but not yet exceptional, as is clear in the display below.



The PCI growth of 3.9% for the first quarter of 2011 is a middle-of-the-road number, signaling that we are not in either one of the extremes: the recession is over, but a robust recovery isn't here. For the coming quarter, the PCI is expecting normal growth of GDP around 3% and normal increases in payroll jobs at approximately 150,000 per month. The unemployment rate is likely to hold stubbornly to its current level but could be driven down by discouraged workers dropping out of the labor force.

We are more optimistic than last month, but are still targeting GDP growth of 3% for the first quarter of 2011, which remains at the low end of the range of expectations. While the PCI's view of the fundamental health of the US economy has remained consistent over the past four months, Wall Street forecasters have been rapidly marking down their previously very optimistic forecasts for Q1 2011. To illustrate this point, we wrote last month, "Over the

past two months, forecasters have been marking up their expectations for 2011 and 2012. The 51 Wall Street Journal forecasters' predictions for 2011 Q1 GDP growth range between 2% and 5.5%, with 90% of the estimates targeting growth in the first quarter at 2.9% or higher. Weakness in the PCI over the first two months of this year suggests that GDP for the first quarter will come in below consensus, near the lower end of the range of current WSJ forecasts."

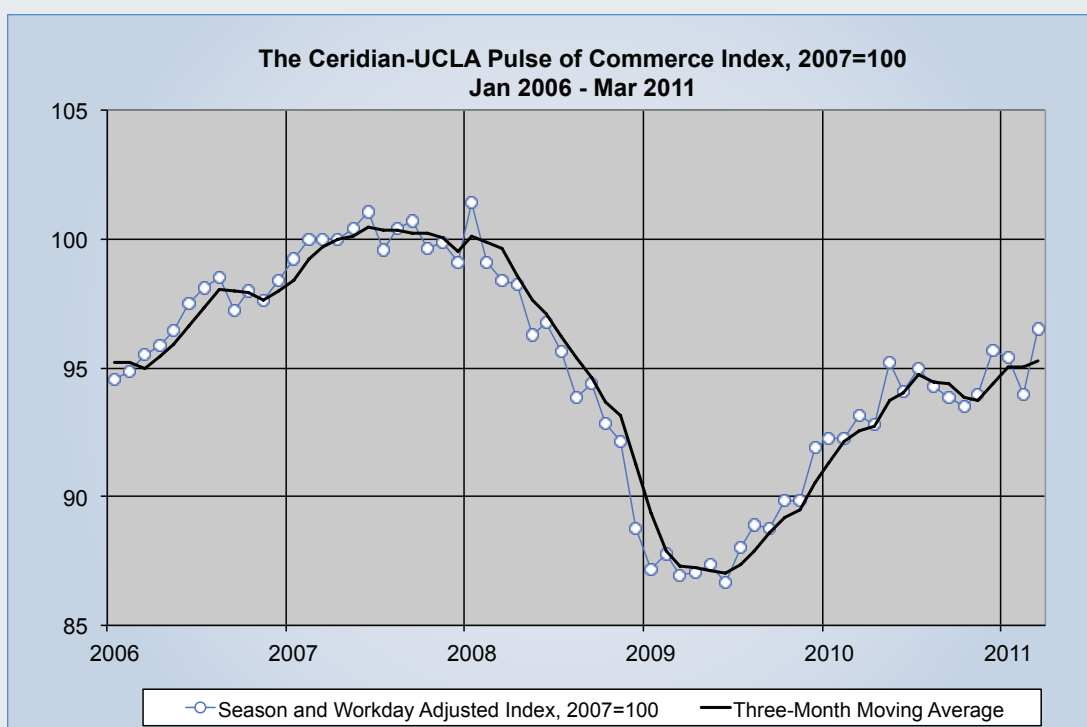
Over time, the PCI has shown a substantial correlation with Industrial Production. Last month, the PCI suggested Industrial Production for February would come in flat to slightly down at -.02% , and it did. The strong March PCI suggests a 0.8% gain in industrial production for March when that data are released by the Federal Reserve on April 15.

### Ceridian-UCLA Pulse of Commerce Index, March 2011 Data Released April 12, 2011

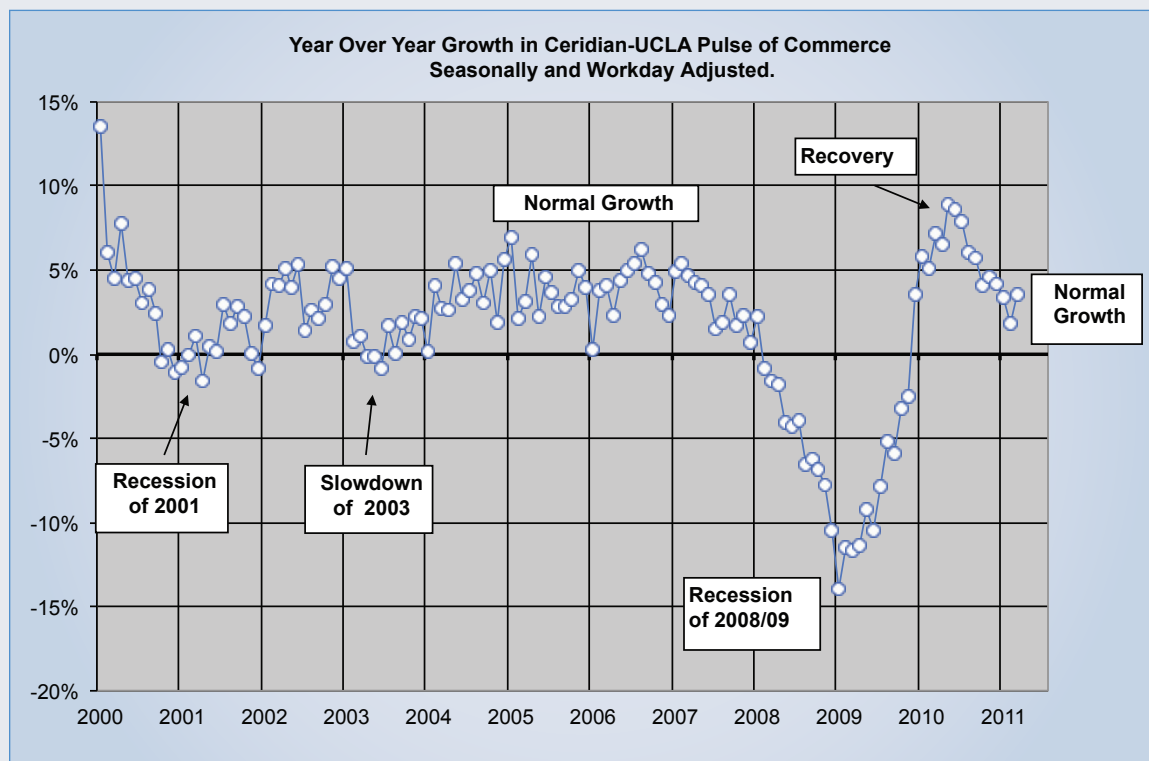
Index Value, (2007=100)	Jan-11	Feb-11	Mar-11
Seasonally and Workdays Adjusted	<b>95.39</b>	<b>93.95</b>	<b>96.48</b>
Unadjusted Index	93.96	88.07	101.60
<b>Month-to-Month Growth</b>	-0.3%	-1.5%	2.7%
<b>Annualized Growth Rates, Adjusted Index</b>			
Three-month v. Previous Three Months	<b>5.1%</b>	<b>5.4%</b>	<b>3.9%</b>
Year-Over-Year	3.4%	1.8%	3.6%

Workday adjustment depends on monthly fractions of weekend days  
Seasonal Adjustment using X12

## PCI and Three-Month Moving Average

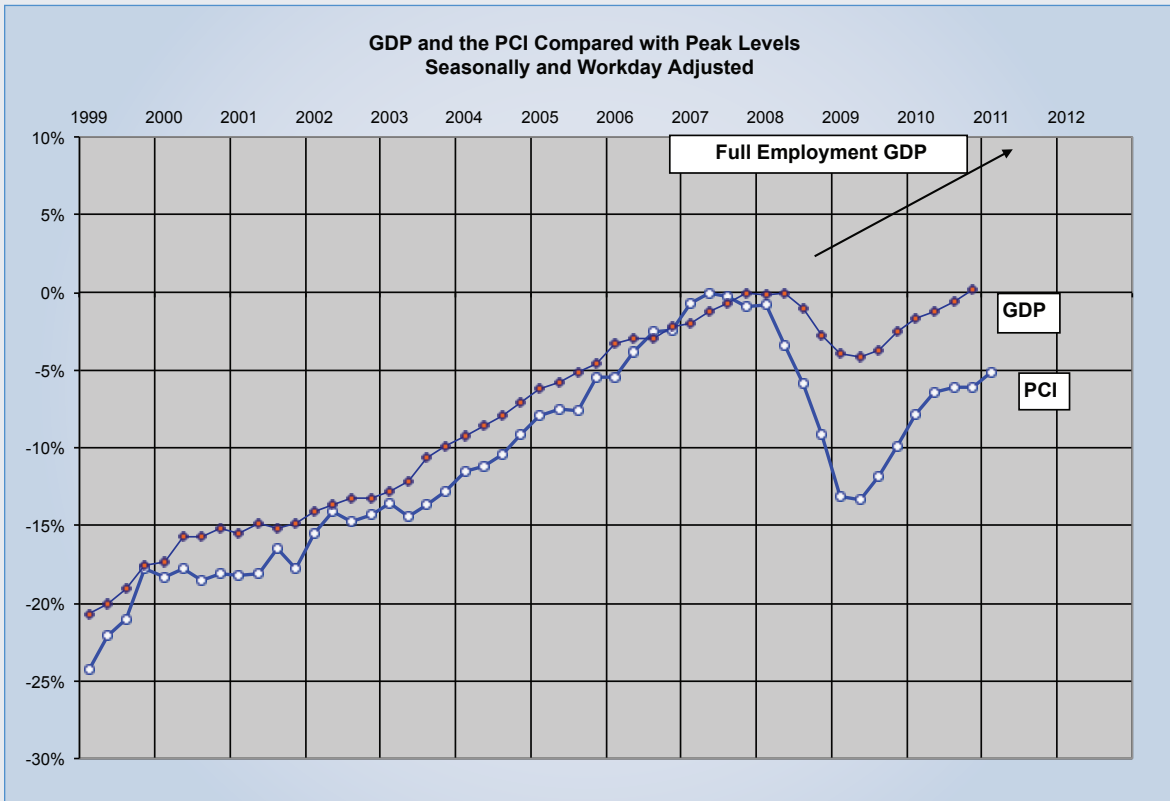


## Year-over-Year Growth of PCI



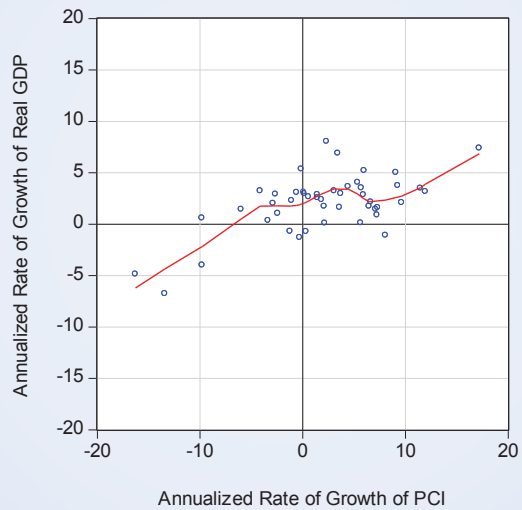
March represents the sixteenth consecutive month of year-over-year growth in the index. The PCI returned to growth in December of 2009 and has been growing, albeit sometimes fitfully, ever since. From a year-over-year standpoint, growth bottomed out in January of 2009 and has been in recovery mode since then. The figure above illustrates the year-over-year growth. It indicates that since 2000, we've had two recessions, one strong recovery, one slowdown and two periods of normal growth. During these normal growth periods, the PCI growth rate fluctuates around 3% per year. We had a spell of normal growth from 2004 to 2006, and it appears we've experienced a period of normal growth over the past six months. In early 2010, we experienced a very brief recovery period characterized by growth in the PCI reliably above 5% per year.

# GDP and Pulse of Commerce Index



The scatter diagram at the right compares the growth of the PCI with the growth of real GDP. The message of this scatter is that the PCI is informative about GDP growth especially at the extremes, during recessions when the PCI is falling more rapidly than 5% per year and during recoveries when the PCI is growing more rapidly than 5% per year. Trucking is an especially important indicator of the economy in these episodes because in these extreme circumstances the goods component of GDP plays a much more important role than during normal times. When the economy is experiencing normal growth, most of the variability in growth on a quarter by quarter basis is due to the variability in the services components which comprise about  $\frac{2}{3}$  of GDP.

**Scatter Diagram of Growth of PCI vs. Growth of Real GDP  
1999Q2 — 2010Q2**



## Foretelling Industrial Production

With the assistance of an econometric model, the PCI can be translated into future Industrial Production values. Over time, the PCI has been highly correlated to Industrial Production and useful in predicting the direction and magnitude of Industrial Production prior to its release each month. The “forecasts” in this report rely only on the PCI and do not make use of other variables such as employment in manufacturing and the PMI index.

The PCI is released on or about the 10th of the month and the corresponding Industrial Production Index is generally released a week later. The table below has the Federal Reserve’s estimates of the growth of Industrial Production in the first five columns, as they have been revised over time. The next six columns in the table are forecasts based on the PCI released monthly from October 2010 to June 2011. The numbers typed in bold are one-month ahead forecasts and the current estimates of Industrial Production, which conform well in general. The Federal Reserve’s estimate of Industrial Production for the month of March will be released on April 15<sup>th</sup>. The PCI indicates Industrial Production will show an increase of 0.8% when it is reported at that time. Note that the index also calls for relatively strong growth of .6% in Industrial Production for each of the next two months.

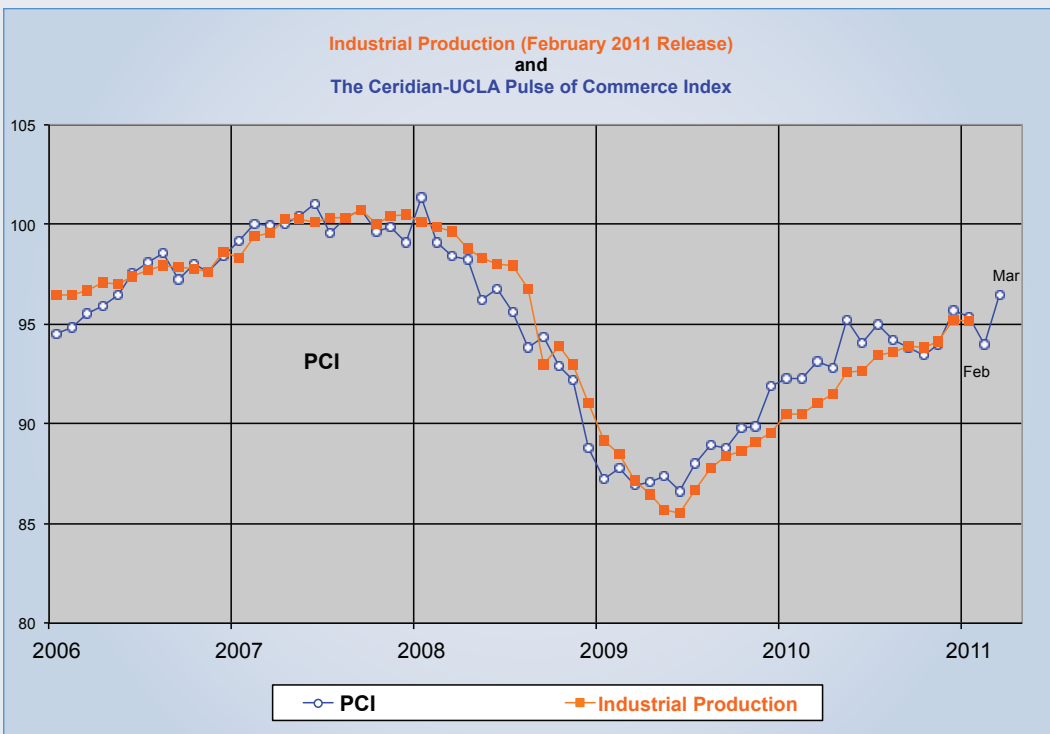
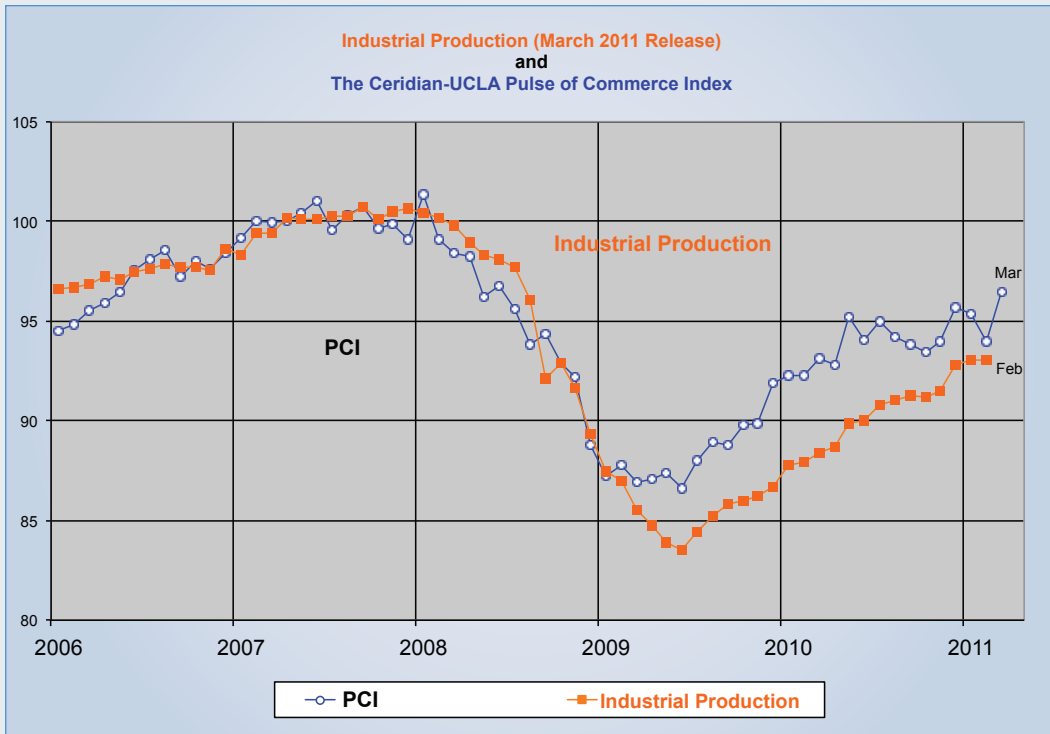
**Growth of Industrial Production: Fed Estimate and PCI Forecast**

	Fed Estimates by Release Date					PCI Forecast by Release Date					
	11/16	12/15	1/14	2/15	3/17	11/9	12/7	1/11	2/9	3/9	4/12
Oct-10	0.01%	-0.20%	-0.13%	-0.04%	<b>-0.07%</b>	<b>-0.16%</b>					
Nov-10		0.41%	0.26%	0.28%	<b>0.36%</b>		<b>0.01%</b>				
Dec-10			0.84%	1.16%	<b>1.41%</b>			<b>0.61%</b>			
Jan-11				-0.06%	<b>0.24%</b>				<b>0.34%</b>		
Feb-11					<b>0.00%</b>					<b>-0.02%</b>	
Mar-11				<b>Release</b>	<b>15-Apr</b>						<b>0.8%</b>
Apr-11											0.6%
May-11											0.6%
Jun-11											0.3%

### Significant Recent Revision in Historical Industrial Production Contrasts with PCI which is not Subject to Revision

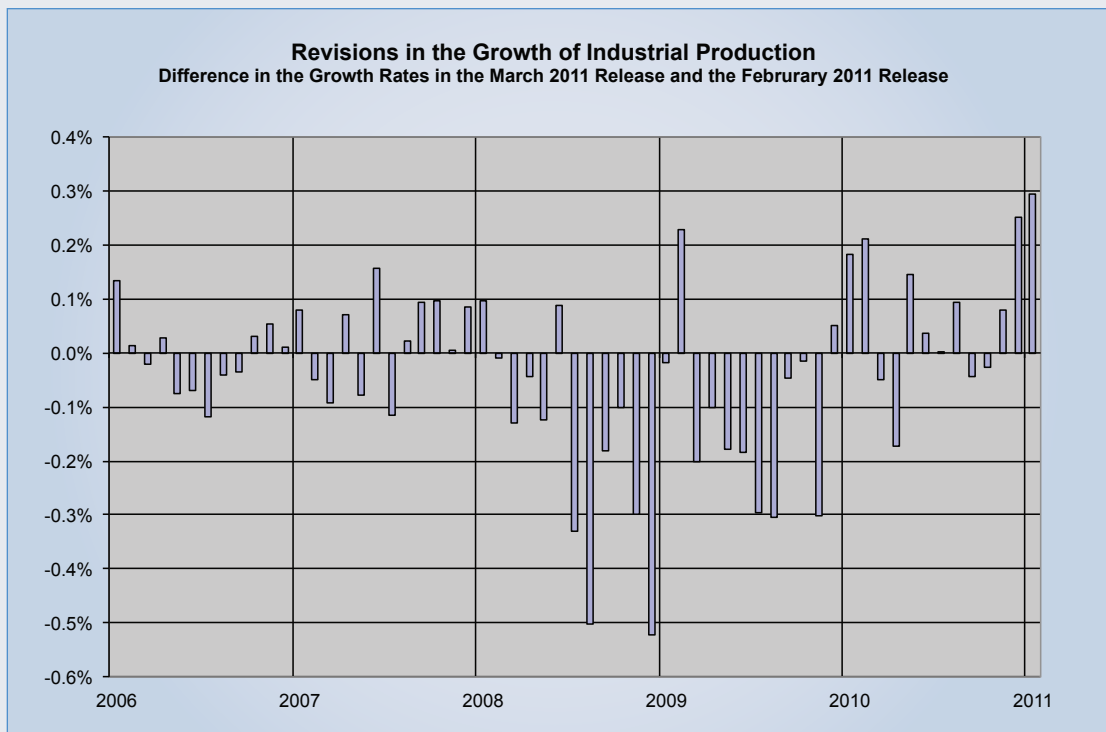
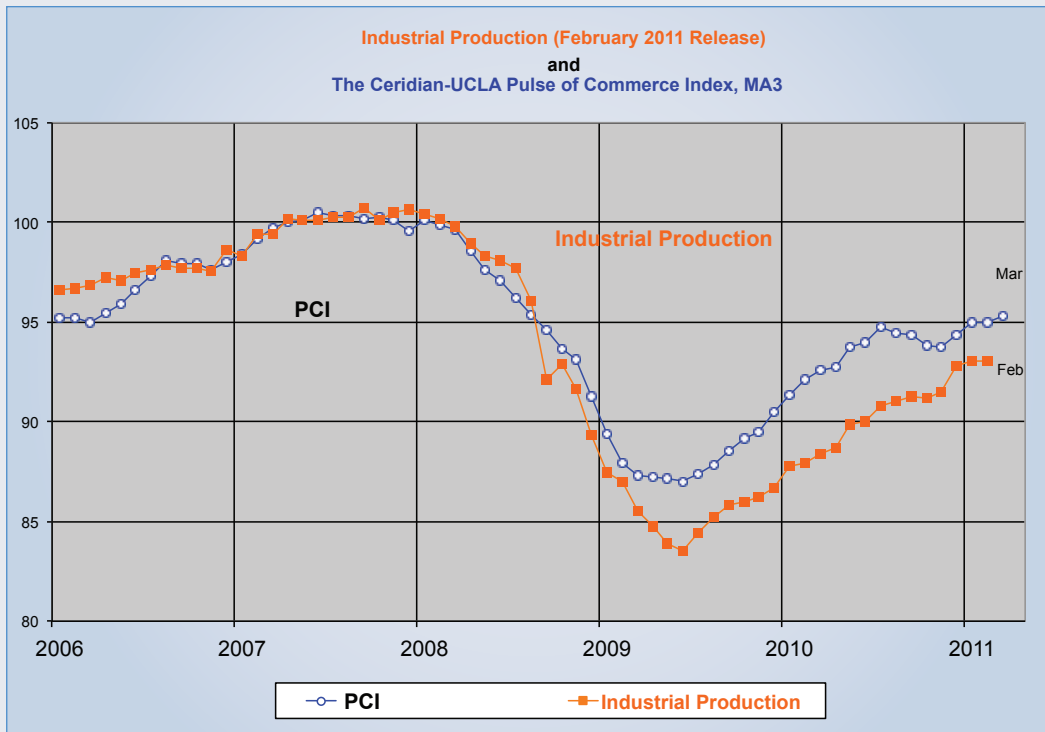
The PCI tracks closely on a monthly basis the Industrial Production Index, though Industrial Production is a moving target. The latest data on IP are compared with the PCI in the first figure below, and the next figure illustrates the IP data as they were reported last month. This was a significant revision to the government’s previous estimates.

This major revision of industrial production was driven by revisions to the Bureau of Labor Statistics estimates of manufacturing employment, which play an important role in the IP estimates. A large revision like this one makes it abundantly clear that industrial production is a moving target (as is almost every other economic series). In contrast, the data underlying the PCI are not subject to revision, because they represent actual transactions, not after-the-fact surveys. Furthermore, the exit and entrance of firms in the data base for the Pulse of Commerce Index is not judged serious enough to merit the kind of benchmark revisions used by the BLS to adjust for births and deaths of firms.

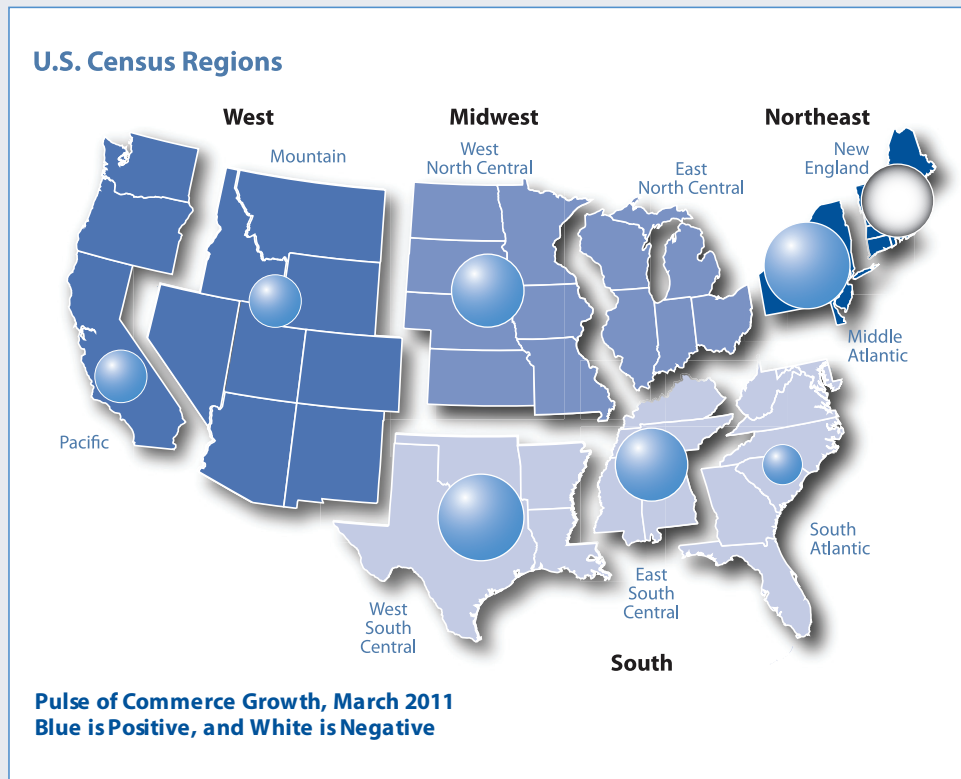


The revised data suggests a much deeper decline in IP than previously releases, revealing the dependence of the estimate of IP on the BLS estimate of employment in manufacturing which was much affected by the March 2010 benchmark revision which was released in February 2011.

The industrial production series has little of the month to month wavering present in the PCI, but that can be removed by moving averages. The figure below compares IP with a three-month moving average of the PCI. This three-month moving average seems to capture most of the important movements in IP.



# Regional Summary



Growth in the PCI in February occurred in the regions farthest from the Midwest snowstorms — the Pacific and the Mountain regions and New England. This month, only New England had a decline in trucking and the center of the country that has been hard hit by February weather had a very strong month in March, led by the Middle Atlantic 6.0% and the West South Central 5.0%. The scatter at the beginning of this report illustrates the close negative relationship between March and February regional PCI, strongly suggesting that winter weather had the effect of postponing February diesel sales until the milder weather in March.

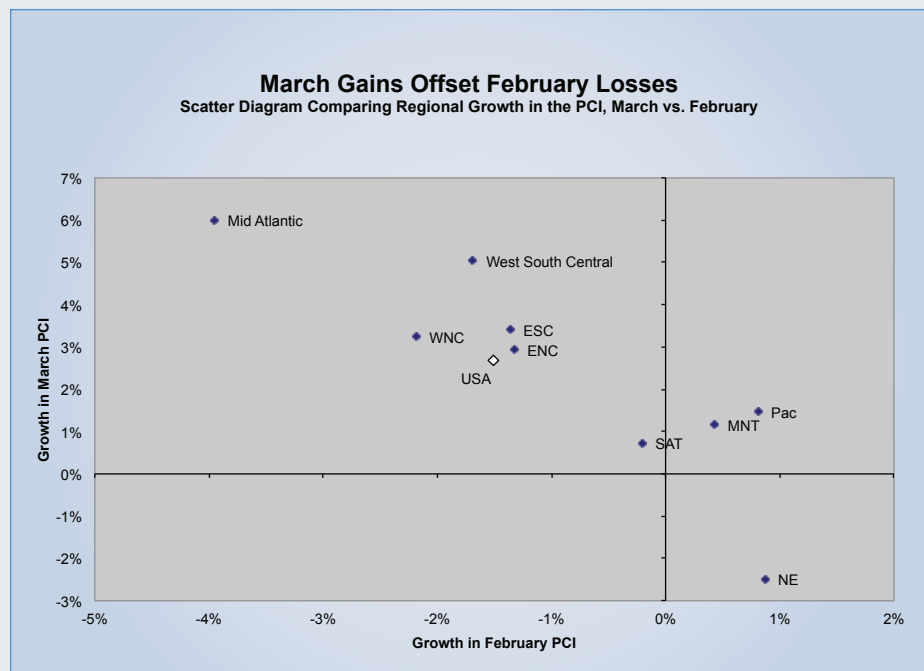
## Ceridian-UCLA Pulse of Commerce Index

Seasonally and Workday Adjusted Sorted by March 2011 Value

Monthly Percent Change				
	Jan-11	Feb-11	Mar-11	2010 Share
Middle Atlantic	0.4%	-3.9%	6.0%	6.7%
West South Central	0.7%	-1.7%	5.0%	19.1%
East South Central	-1.5%	-1.4%	3.4%	11.5%
West North Central	-2.0%	-2.2%	3.2%	10.0%
East North Central	0.6%	-1.3%	2.9%	18.2%
<b>US Overall</b>	<b>-0.3%</b>	<b>-1.5%</b>	<b>2.7%</b>	<b>100.0%</b>
Pacific	-2.3%	0.8%	1.5%	5.8%
Mountain	1.4%	0.4%	1.2%	9.6%
South Atlantic	-1.2%	-0.2%	0.7%	17.8%
New England	-0.3%	0.9%	-2.5%	1.4%

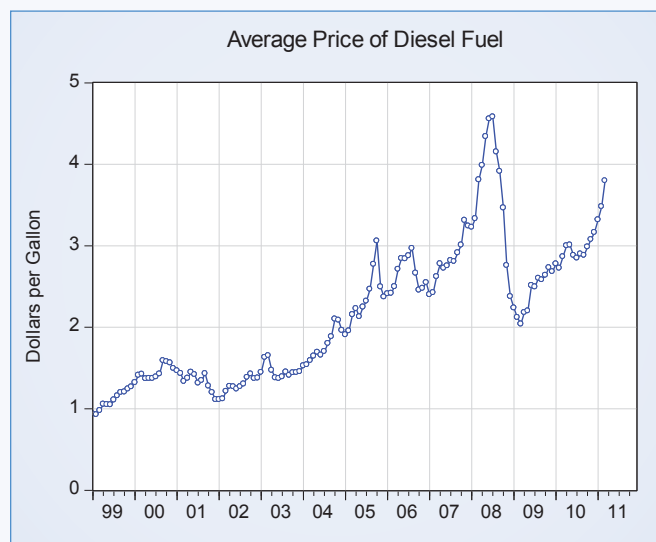
## Impact of February Snowstorms

Last month we wrote that “The February daily data were impacted by the massive snowstorm that was centered in the heavily-trucked Midwest early in the month. However, the daily data also suggests that much of the volume that was “lost” during the first week of the month was “found” later in the month, meaning that weather was not the major reason for the decline in the PCI this month.” The March data on a regional basis are again supportive of the winter-weather hypothesis because the regions that were especially weak in February were especially strong in March. This suggests that at least some of February’s weak report and some of the strong March report was due to activity lost in February, postponed to March. This is contrary to what we concluded last month. This negative relationship is illustrated in the figure below.



## Impact of Higher Fuel Prices

Last month we expressed concerns about the rising price of diesel fuel. The jump in the volume of diesel fuel purchased this month came against a headwind of a very substantial rise in diesel fuel prices to \$3.80 a gallon in March 2011 compared with \$2.80 a gallon a year ago. Though this rise in fuel costs encourages greater fuel efficiencies, we have not found any evidence that the variability in fuel efficiencies affects the movement of the PCI over the short run. The more likely channel through which higher costs of diesel and other refined products affect diesel volumes is by slowing the rate of growth of demand. This would be especially worrisome if the economy were late in the expansion and had built up major imbalances that need correction, but early in an expansion with hugely stimulative monetary policy, inflation seems the greater worry than a large drop in growth. Still higher crude oil prices inevitably will suck some of the vigor out of the economy.



## About the Ceridian-UCLA Pulse of Commerce Index

The Ceridian-UCLA Pulse of Commerce Index by UCLA Anderson School of Management is based on real-time fuel consumption data for over the road trucking and serves as an indicator of the current state and possible future direction of the U.S. economy. By tracking the volume and location of diesel fuel being purchased, the index closely monitors the over the road movement of produce, raw materials, goods-in-process and finished goods to U.S. factories, retailers and consumers. Working with economists at UCLA Anderson School of Management and Charles River Associates, Ceridian publicly releases the Index monthly and also offers companies access to customized reports and data.

Comments in the monthly report are prepared by Edward Leamer, Chief Economist of the Ceridian-UCLA Pulse of Commerce Index and Director of the UCLA Anderson Forecast.

Ceridian is a global business services company providing electronic and stored value card payment services and human resources solutions. UCLA Anderson School of Management is known globally as a leading school of management. Charles River Associates is a leading global consulting firm that offers economic, financial, and business management expertise to organizations around the world.

For additional information on the Ceridian-UCLA Pulse of Commerce Index, please visit [www.ceridianindex.com](http://www.ceridianindex.com) or call 1-800-729-7655.