

# Ceridian-UCLA Pulse of Commerce Index<sup>®</sup>

By UCLA Anderson School of Management

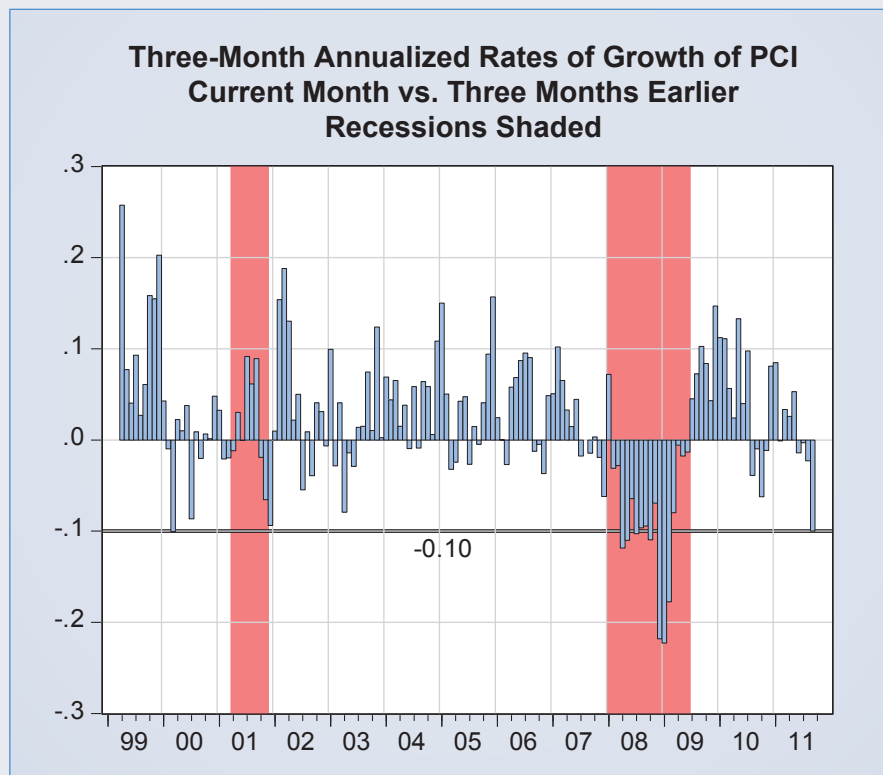
October 12, 2011



UCLAAnderson  
School of Management

## ***Pulse of Commerce Index Falls For the Third Month In a Row*** ***This is alarming news for the third quarter and beyond***

The Ceridian-UCLA Pulse of Commerce Index® (PCI®), issued today by the UCLA Anderson School of Management and Ceridian Corporation fell 1.0 percent in September on a seasonally and workday adjusted basis, following a 1.4 percent decline in August and a 0.2 percent decline in July.



In the last three months, the PCI has declined at an annualized rate of 10 percent per year as illustrated in the figure above. This rate of decline has been exceeded only in the deep recession of 2008/09, and equaled only once outside of a recession in March 2000. In other words, since June, trucking activity has been receding at a pace that would be expected to show up in other economic measures soon. Two or three more months like this would confirm an official recession.

With the past three negative months, the PCI declined at the annualized rate of 4.3 percent in the third quarter of 2011 compared with the second quarter. Outside of the recessions, we have never experienced such a large quarterly decline in the PCI. Our near-recession situation is made only slightly less concerning by two facts: the declines in the recessions have been much larger than 4.3 percent, and the PCI decline in 2011Q3 is almost as much in 2003Q2.

With hopes that the September data would be positive, last month we wrote, *“Based on the July and August data, the PCI will likely decline in the third quarter and this suggests GDP growth of zero to 1.0 percent.”* Due to the disappointing September number and the consequent third quarter 4.3 percent decline of the PCI, it will be difficult to get a positive GDP number in 2011Q3 — but trucking activity tends to lead the economy, and the effect of the positive growth in the PCI from 2011Q2 lingers on. As such, this makes the PCI-based forecast for third quarter GDP growth equal to zero, meaning just as likely to be negative as positive.

More ominously, the last weeks of September were the weakest, promising more of the same in October.

The positive point of view on this extremely disappointing news is that businesses, in the face of the considerable concerns about growth, appear to be unwilling to restock for a potentially vibrant holiday season at the same time as normal, and they are planning to ramp up inventories late this year, if and when the sales start to materialize. In other words, what we are observing this month is only a weak forecast of future sales, a forecast that doesn't have to be self-fulfilling. With lean inventories, increases in sales mean increases in production and in jobs.

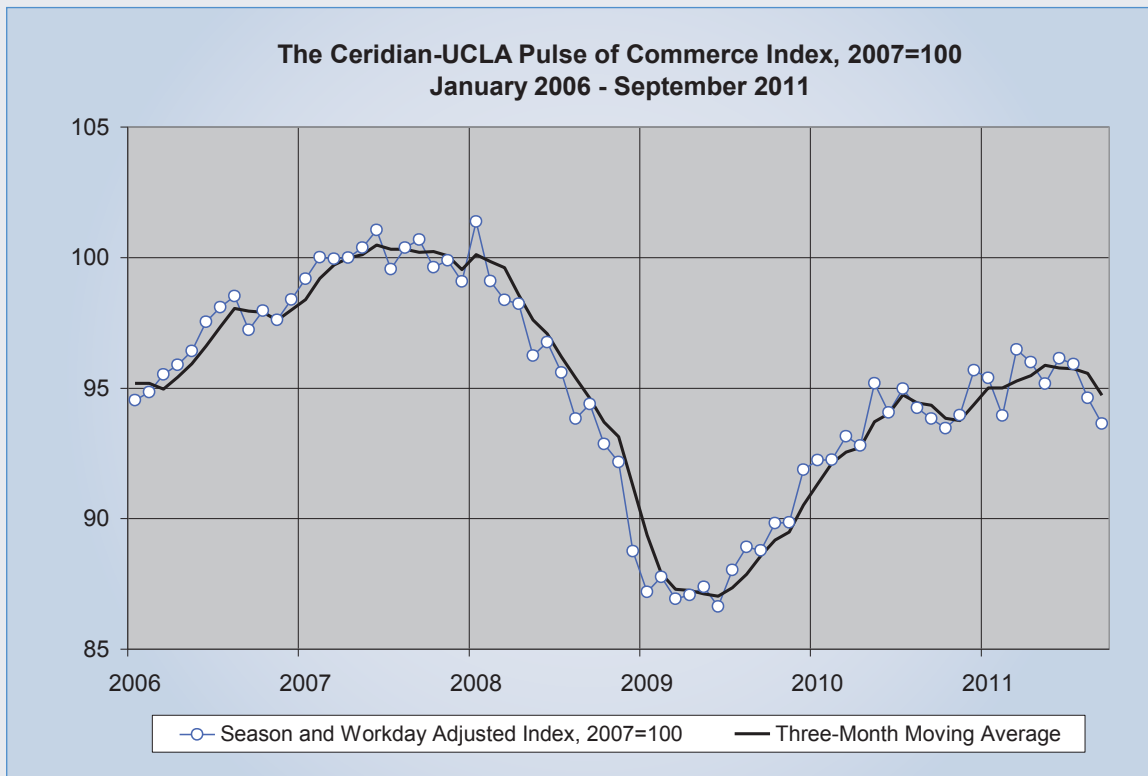
With the PCI-based forecast for 2011Q3 GDP growth zero, the PCI-based forecast for September Industrial Production is -0.55 percent. Industrial Production is one of the few indices that tracks the official start and end dates of recessions with reasonable accuracy; without a sustained decline of Industrial Production, this slow-growth episode we are currently in is not likely to be called a recession by the committee of NBER economists who determine when a recession officially begins and ends.

## Ceridian-UCLA Pulse of Commerce Index, September 2011 Data Released October 12, 2011

Index Value, (2007=100)	Jul-11	Aug-11	Sep-11
Seasonal and Workday Adjusted	<b>95.93</b>	<b>94.62</b>	<b>93.63</b>
Unadjusted Index	93.17	100.69	93.70
<b>Month-to-Month Growth</b>	-0.2%	-1.4%	-1.0%
<b>Annualized Growth Rates, Adjusted Index</b>			
Three-month v. Previous Three Months	<b>1.1%</b>	<b>-1.3%</b>	<b>-4.3%</b>
Year-Over-Year	1.0%	0.4%	-0.2%

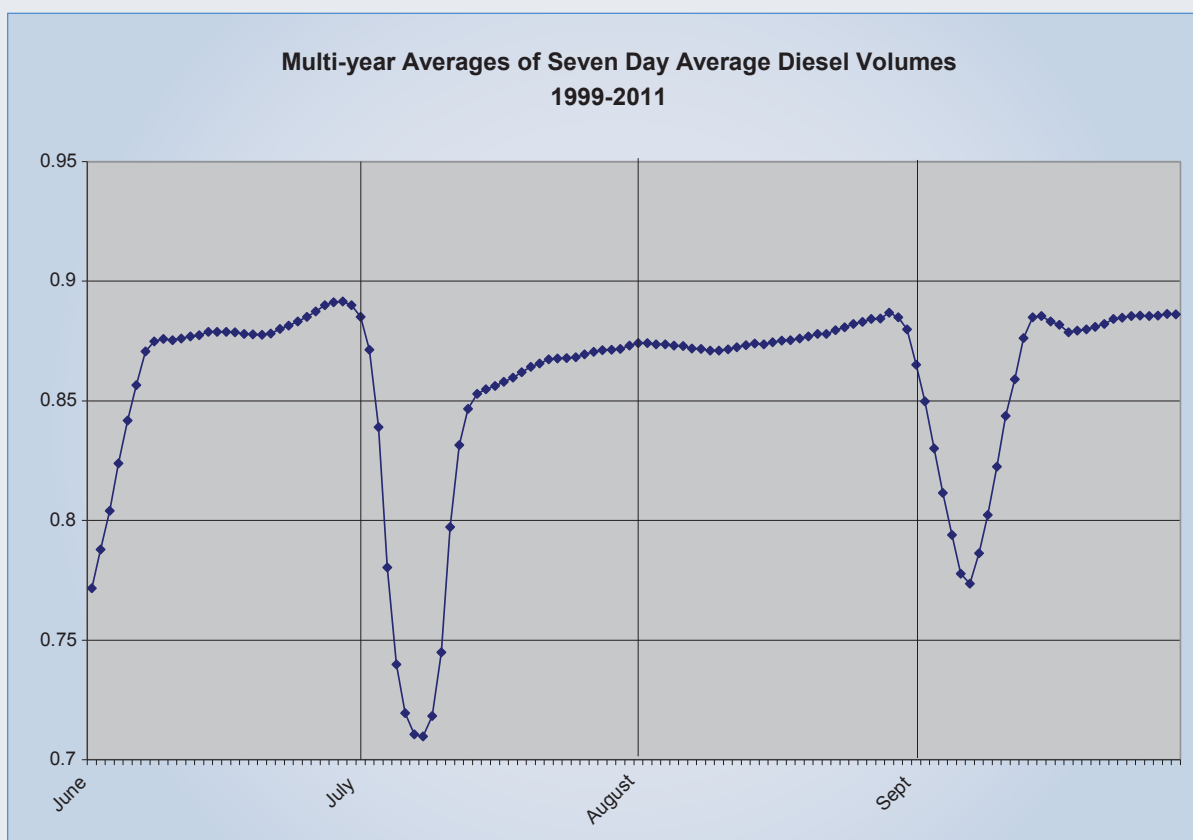
Revised seasonal and workday adjustment through 2010q12  
 Workday adjustment depends on monthly fractions of weekend days.  
 Seasonal adjustment using X12

### PCI and Three-Month Moving Average



## Daily Data: Slowdown Commenced Mid-July; End of September is the Worst

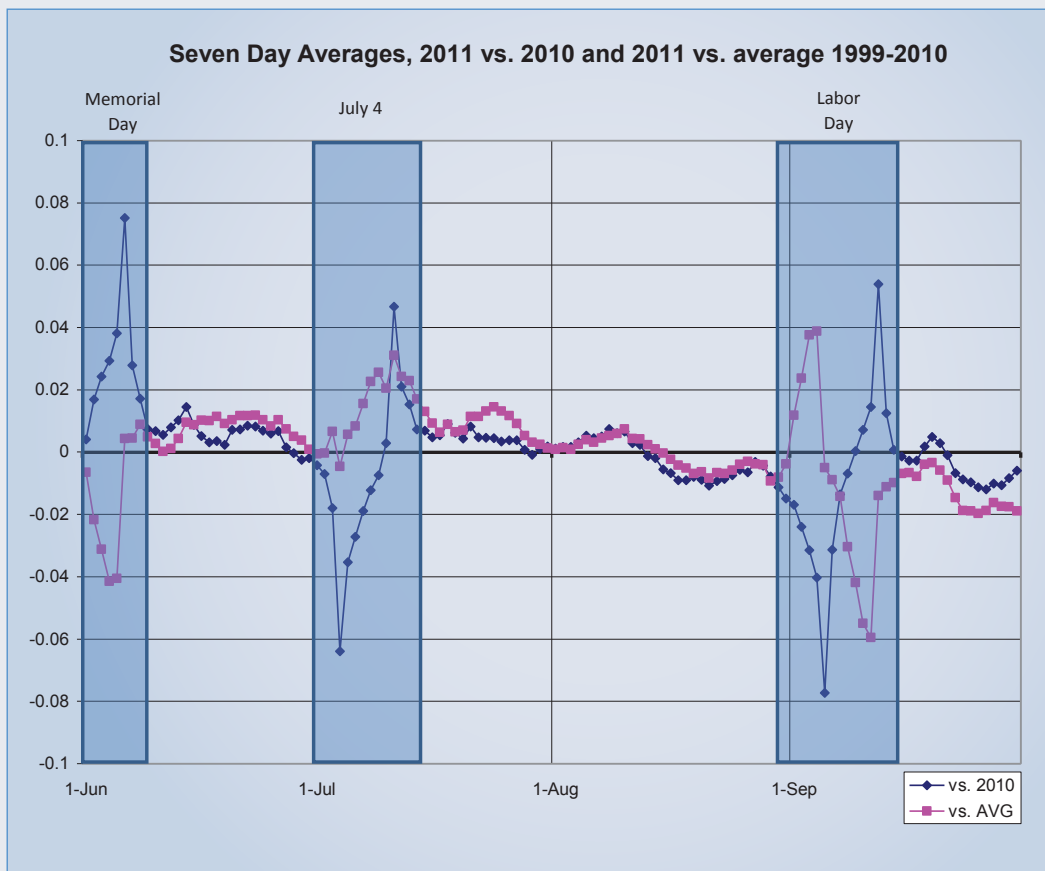
Because the underlying PCI data are recorded for each card transaction, we can look for the slowdown in the daily data. During the course of a week, diesel fuel purchases swing dramatically, with the weekend volumes only half of the Wednesday volume. One way to control for the day-of-the-week effect is to use seven-day averages of the daily data. The figure below illustrates the typical levels of seven-day averages during the months of June, July, August and September, where typical means averages across the years of the data, 1999-2011. The steep declines occur during the three holidays — Memorial Day, 4<sup>th</sup> of July, and Labor Day. Peak volumes occur at the end of June, in anticipation of low volumes during the 4<sup>th</sup> of July holiday as well as the rest of July. From the middle of July until the end of September, volumes are steadily increasing, interrupted by the Labor Day decline, which includes “shoulders” of anticipatory purchases and makeup purchases around the Labor Day event. Incidentally, because these are seven-day averages, the troughs occur two or three days after the holidays, thus selecting the seven-day period with the holiday in the middle.



The figure below illustrates the seven-day moving averages of diesel purchase volumes in June, July, August and September 2011 compared with 2010 and the average from 1999 to 2010. These two comparisons have each been normalized to average to zero in this four-month period.

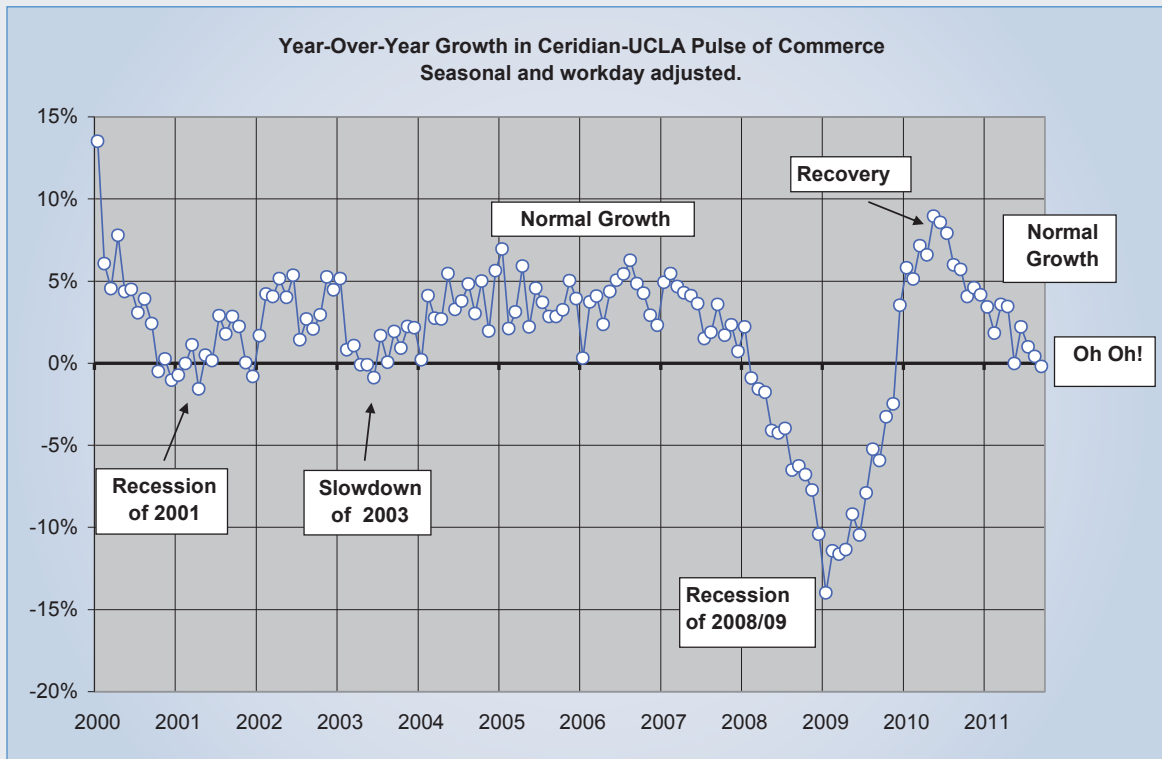
Although the 4<sup>th</sup> of July is always on the same day, the impact on diesel fuel purchases depends on the day of the week on which the 4<sup>th</sup> occurs. This causes noise around July 4<sup>th</sup>, and similarly around Memorial Day and Labor Day. These holidays are shaded in order to focus the eye on the rest, which allows a more reliable year-by-year comparison.

In the middle of June and July, the 2011 data were about 1 percent above the 1999-2010 average, but by the end of September, the 2011 data were about 2 percent below the average. That 3 percent decline from mid-July to the end of September in “calendar-adjusted” daily PCI is a recession-in-the-making. With the worst numbers at the end of the series, there is no hint that this problem is ending. There is some slight solace in the fact that compared with 2010, September doesn’t look so bad.



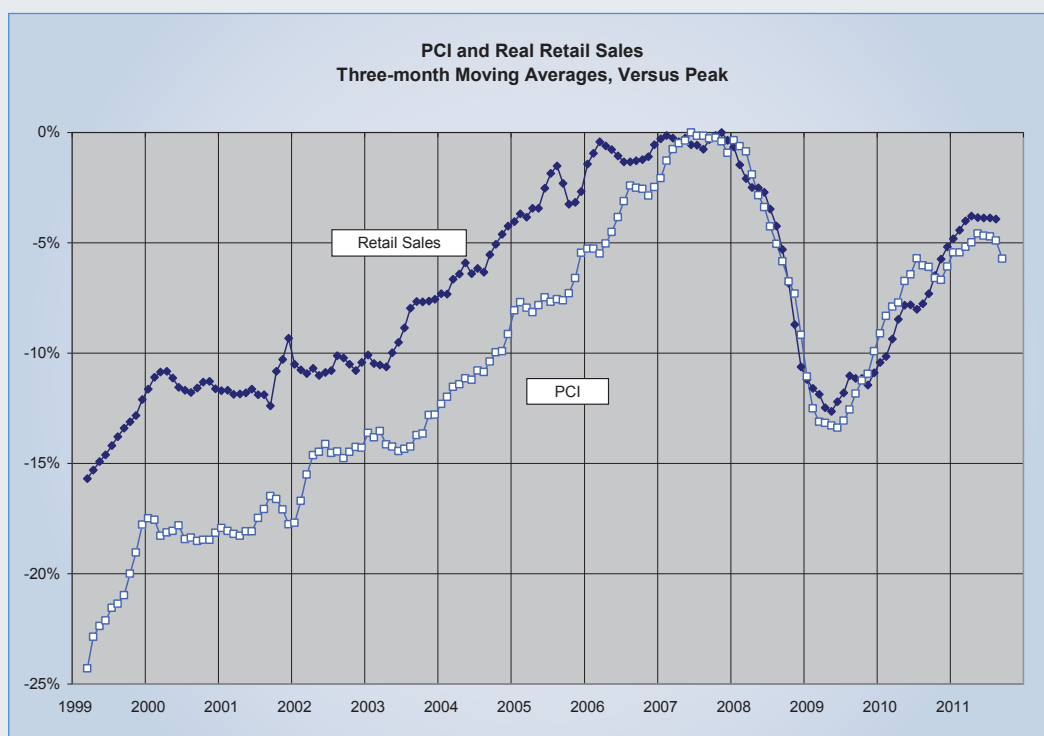
## Year-Over-Year Growth of PCI

The year-over-year growth in the PCI is back to near-zero, like it was during the slowdown of 2003.



## Retail Sales and the PCI: Inventories in Motion

The growth in real GDP is, to a large extent, driven by growth in consumer spending. One symptom of consumer spending is real retail sales. In light of the ability of the PCI to track GDP overall, it isn't surprising that the PCI also tracks real retail sales, as illustrated below. Viewing the PCI as a measure of inventories in motion, it appears that inventory restocking in 2010 got ahead of real retail sales, and the decline in the PCI in the second half of 2010 was an indication of inventory reductions realigning with sales. This year we have experienced an ominous cessation of growth of both the PCI and real retail sales, and now in September 2011, a sharp decline in the three-month moving average. In the coming months, we are going to see either an improvement in the PCI or a deterioration of real retail sales.



## 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 with Industrial Production and is 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 10<sup>th</sup> of the month and the corresponding Industrial Production Index is generally released a week later. The table on page 9 has the Federal Reserve’s estimates of the growth of Industrial Production in the first five columns from April 2011 to the present, as they have been revised over time. The next six columns in

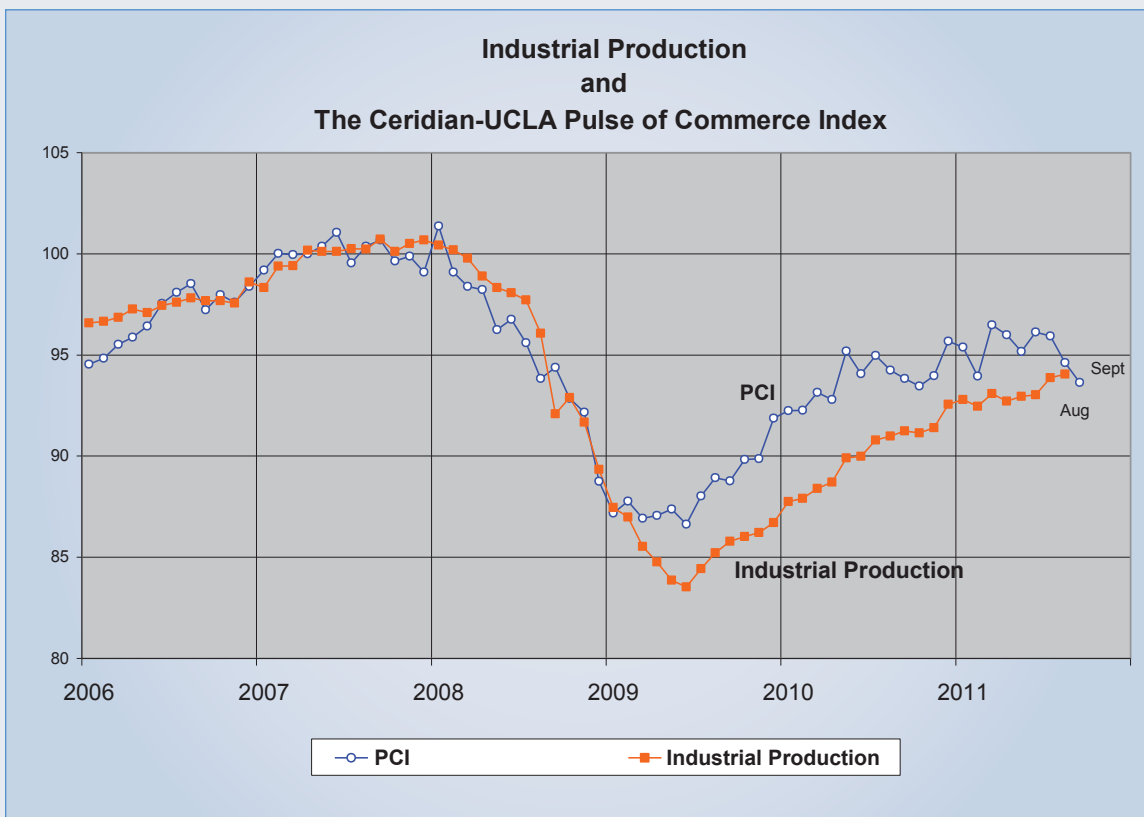


the table are forecasts for April 2011 to December 2011 based on the PCI released monthly. The numbers typed in bold are one-month ahead forecasts and the current estimates of Industrial Production, which conform well in general. The Federal Reserve's estimate of Industrial Production for the month of September will be released on October 17<sup>th</sup>. The PCI indicates Industrial Production growth will decline significantly in September, -0.55 percent.

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

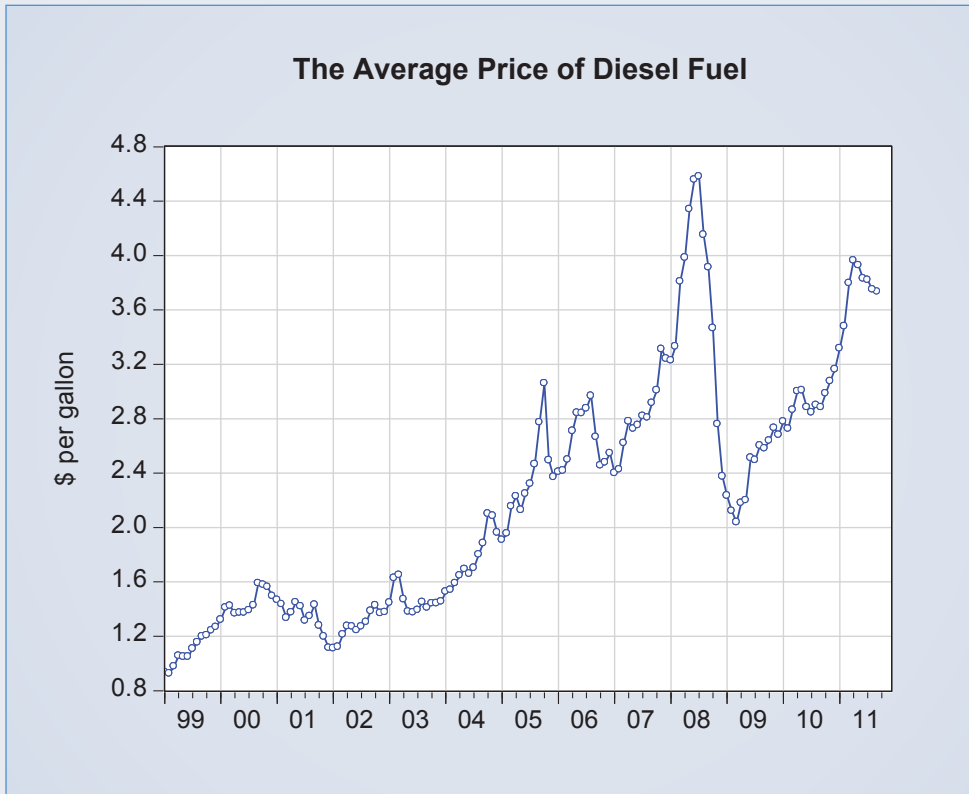
	Fed Estimates by Release Date					PCI Forecast by Release Date					
	Jun	Jul	Aug	Sep	Oct	May	Jun	Jul	Aug	Sep	Oct
Apr-11	-0.01%	-0.03%	-0.14%	-0.34%	<b>-0.40%</b>	<b>0.25%</b>					
May-11		0.10%	-0.08%	0.22%	<b>0.26%</b>		<b>0.05%</b>				
Jun-11			0.19%	0.37%	<b>0.08%</b>			<b>0.17%</b>			
Jul-11				0.90%	<b>0.90%</b>				<b>0.00%</b>		
Aug-11					<b>0.18%</b>					<b>-0.26%</b>	
Sep-11					<b>17-Oct</b>						<b>-0.55%</b>
Oct-11											-0.06%
Nov-11											0.09%
Dec-11											0.00%

### Industrial Production and The Ceridian-UCLA Pulse of Commerce Index



# Diesel Fuel Prices

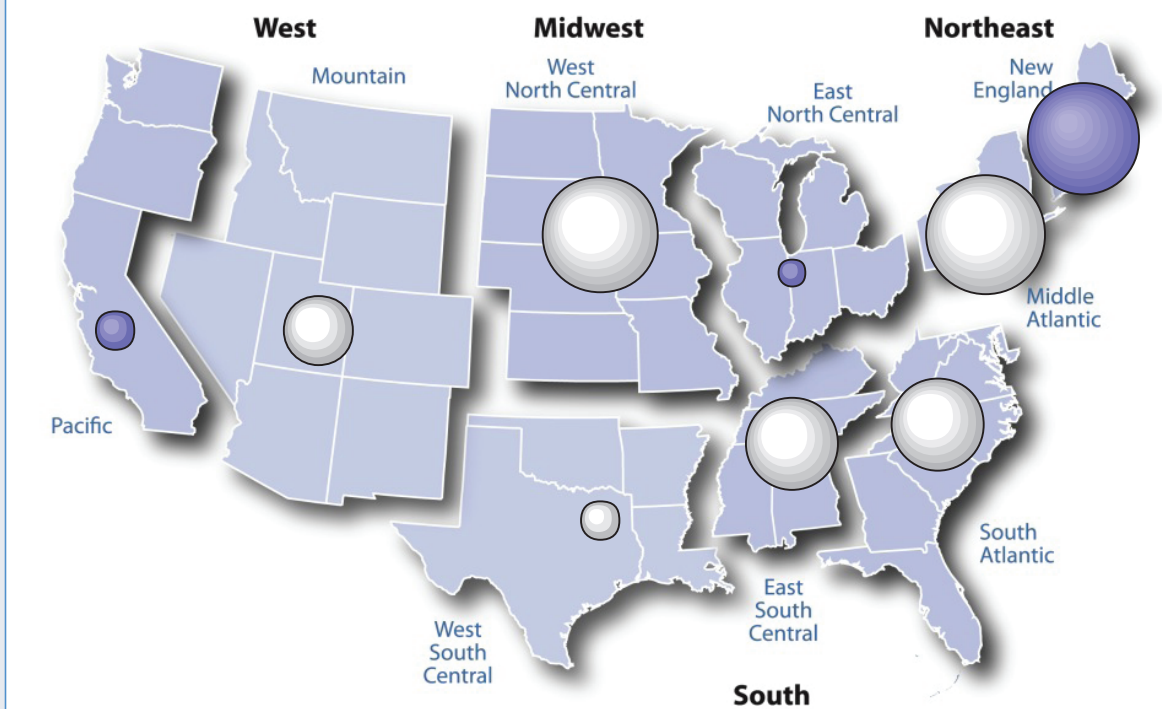
One shred of good news is that diesel fuel prices have declined from their peak in April 2011 of \$3.96 per gallon to \$3.73 per gallon in September. The lower prices for everything energy related will leave consumers with more to spend on other items.



## Regional Summary

For the second month in a row, the New England and the Pacific regions experienced growth, while almost all others experienced a decline.

### U.S. Census Regions



#### U.S. Census Regions Legend:

Blue is positive, white is negative. The size of bubble measures the percentage change of the PCI month-to-month. This data was illustrated from the **Ceridian-UCLA Pulse of Commerce Index** table below.

### Ceridian-UCLA Pulse of Commerce Index Monthly Growth Rates

Seasonally and Workday Adjusted, Sorted by September 2011 Value

	Monthly Percent Change			2010 Share
	Jul-11	Aug-11	Sep-11	
New England	-4.4%	0.3%	2.2%	1.4%
Pacific	-2.5%	1.4%	0.3%	5.8%
East North Central	1.7%	-2.3%	0.1%	18.2%
West South Central	-1.4%	-0.8%	-0.2%	19.1%
Mountain	-1.2%	-2.9%	-0.8%	9.6%
<b>US Overall</b>	<b>-0.2%</b>	<b>-1.4%</b>	<b>-1.0%</b>	<b>100.0%</b>
South Atlantic	0.1%	-0.3%	-1.4%	17.8%
East South Central	-1.2%	-3.0%	-1.5%	11.5%
West North Central	-0.9%	-1.0%	-2.2%	10.0%
Middle Atlantic	1.8%	-0.6%	-2.4%	6.7%

## 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.

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.