

THE ECONOMIC SITUATION

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- The Great Transformation from manufacturing to services.
- Where are the employment gains in the new economy?
- Continuing the search for the knowledge economy.
- South Carolina lagging but getting better.
- A final look at the 2006 forecast.

From manufacturing to services

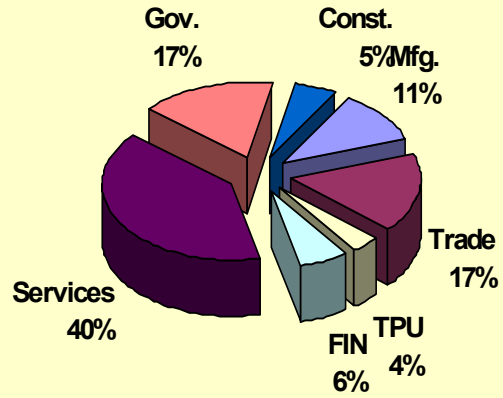
The Great American Bread Machine continues to do amazing things. While young people riot in Paris, fearful of their prospects if France moves to free up labor markets, the U.S. economy continues to wipe out 4.5 million jobs almost every month and add another 4.7 million. And each month, total personal income rises..., at least for the nation if not for you and me!

Ours is a dynamic economy, one that responds to change with a vengeance. It's a good thing we already have this economy. We would never see a free market economy win in a democratic election!

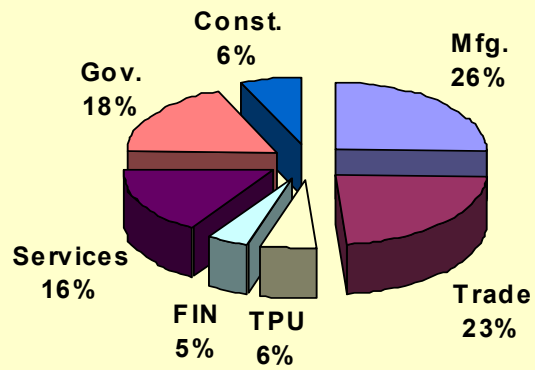
I offer a few pictures to emphasize what has happened. First, consider the two accompanying pie charts that show where people work. The first is for 2005; the second for 1972. The differences are dramatic. The economy is obviously moving from manufacturing to services, at least in terms of where people work. And producing more wealth all along. (By the way, TPU stands for transportation and public utilities. Trade includes wholesaling, retailing, and fast food.)

A more interesting level of detail is seen in the third chart, which gives a breakdown for the services sector. I call attention to the two large slices in services: Education and Health and Professional and Business Services. The new Knowledge Economy is found in the Professional and Business Services sector. We shall return to this topic later.

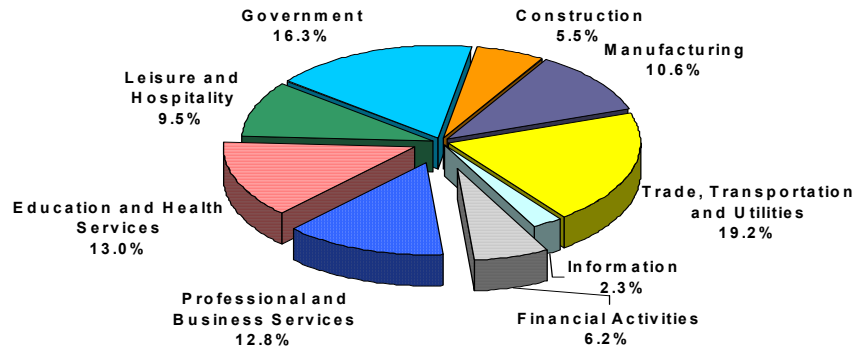
U.S. Employment Sectors: 2005



U.S. Employment Sectors: 1972



U.S. Employment Sectors: December 2005



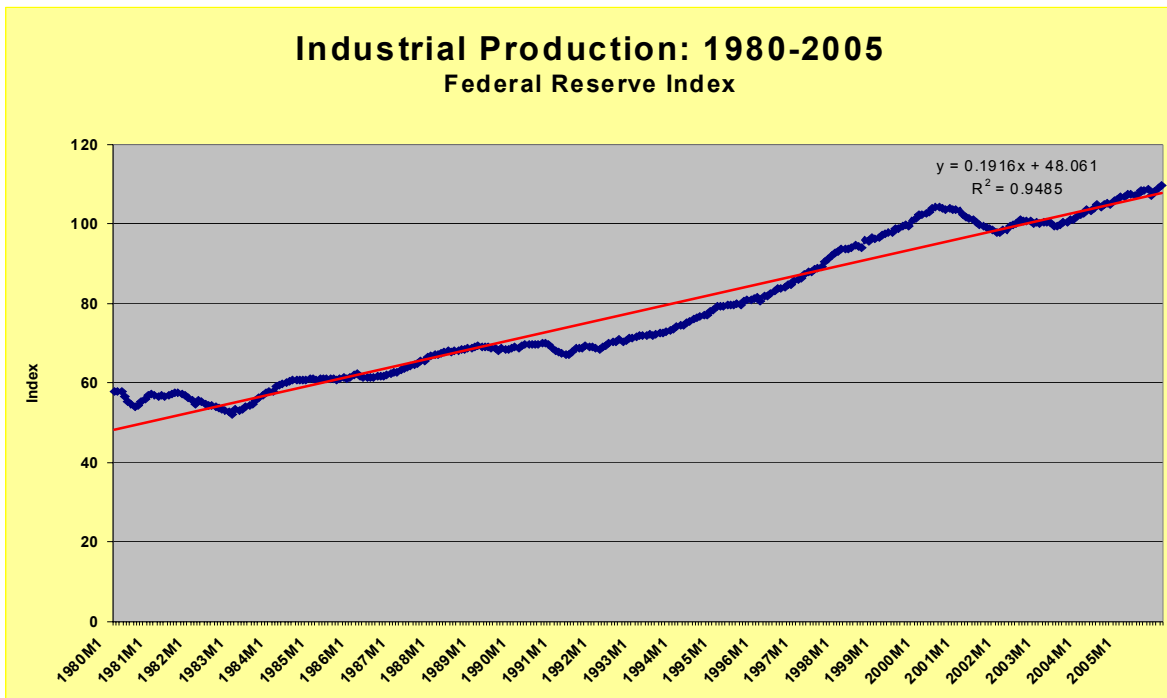
But manufacturing output is flourishing!

Yes, employment in manufacturing is declining sharply and rapidly. But we must not confuse where people work with what our nation produces, unless we are simply interested in increasing the number of jobs, which after all is a decent goal to pursue. While fewer and fewer people are employed in manufacturing, more and more goods continue to flow from U.S. manufacturing plants.

The next chart shows data for the national economy. This is an index of total output from manufacturing, mining, and utilities maintained by the Federal Reserve Board. You will see that I have inserted a trend line into the chart. As you follow along the trend line in the chart, you will see the manufacturing boom of the late 1990s and recession that followed that was generated when the Federal Reserve Board severely tightened the money supply. In recent months, industrial production is on the rise again.

Close examination of the chart reveals an equation described by the trend line. The estimate tells us that there is 1% increase in industrial output about every five months.

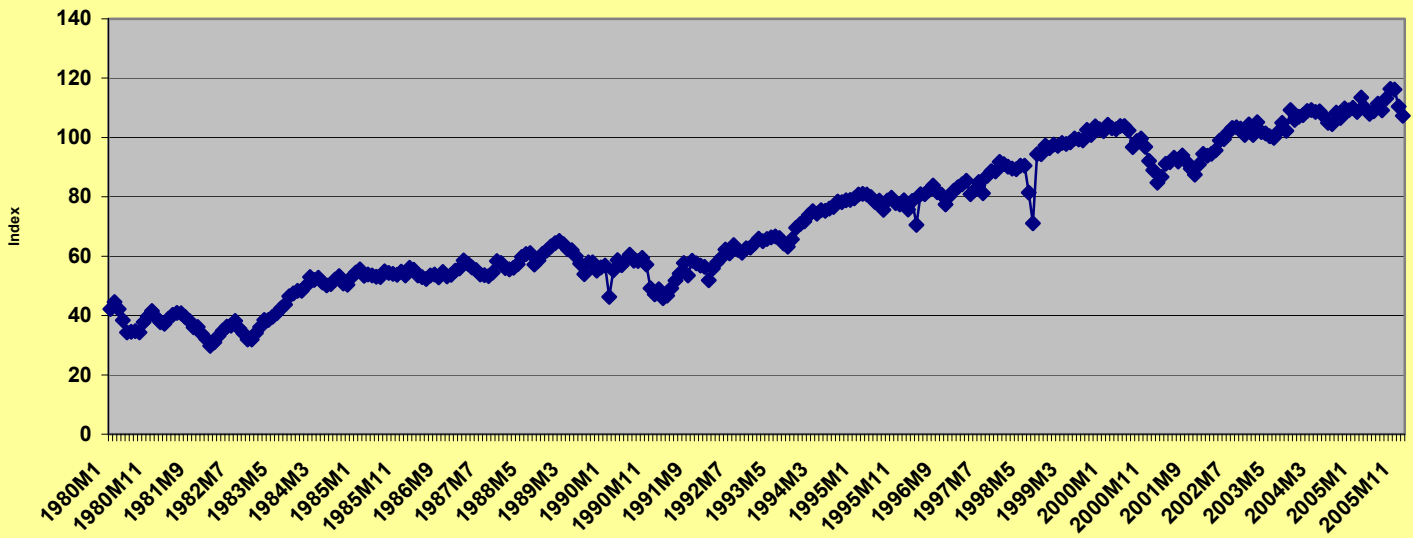
Manufacturing is not surging, but it is far from dead.



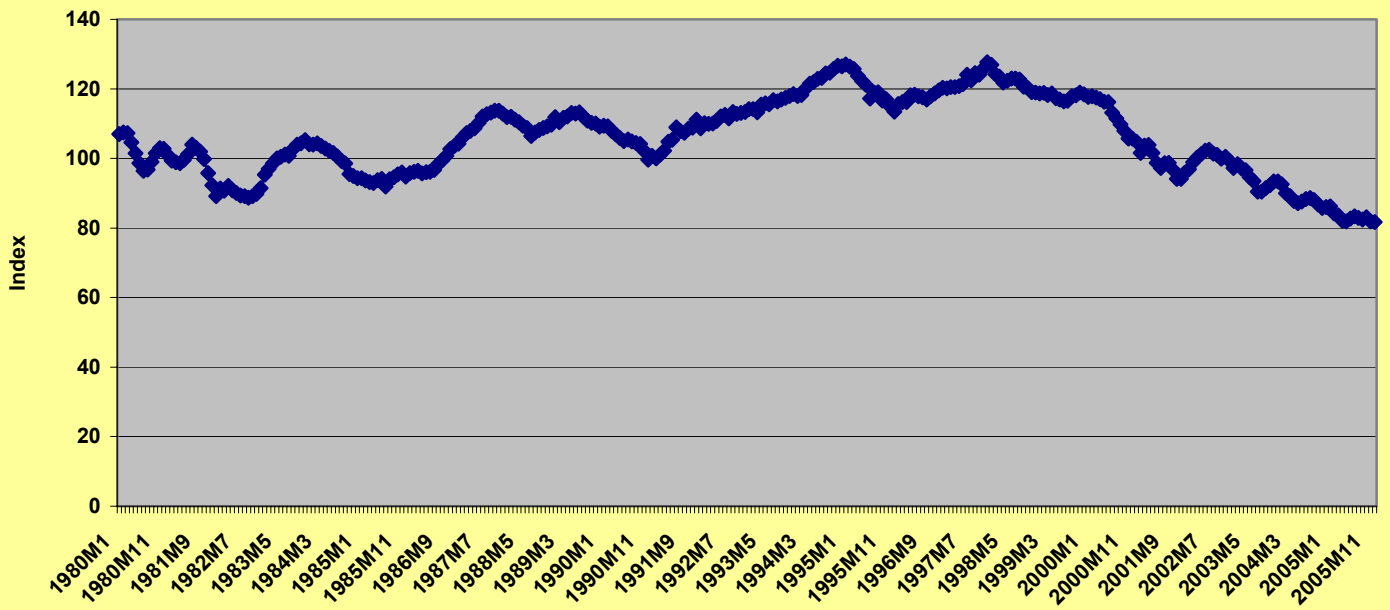
Where is the strength in the economy? And what about weakness?

The next two charts speak to these questions. The first one shows autos and parts, an international giant. The second shows textiles, an industry that continues to contract. We see the pattern in our own region: News of textile plant closings are accompanied by announcements of auto plant expansions.

Autos & Parts: 1980-2005
Federal Reserve Index



Textile Production: 1980-2005
Federal Reserve Index



Searching for the knowledge economy

The strength of U.S. manufacturing relies heavily on our powerful services economy. It is services that supports patent production, scientific research, product design and packaging, and the process of getting innovations to market.

In my last Economic Situation Report, I provided a summary of data organized by Clemson agricultural economists David Barkley and Mark Henry. That section of my report focused on S.C. metropolitan areas and their rankings among knowledge economy regions in the South. The rankings included patents per 1,000 people, share of workforce employed in technical professions, the share of the population with college degrees, and R&D expenditures of local universities. The message in the data is rather simple. It takes knowledgeable people to produce a knowledge economy. S.C. cities looked pretty good for some dimensions of the data, but not good at all for other dimensions.

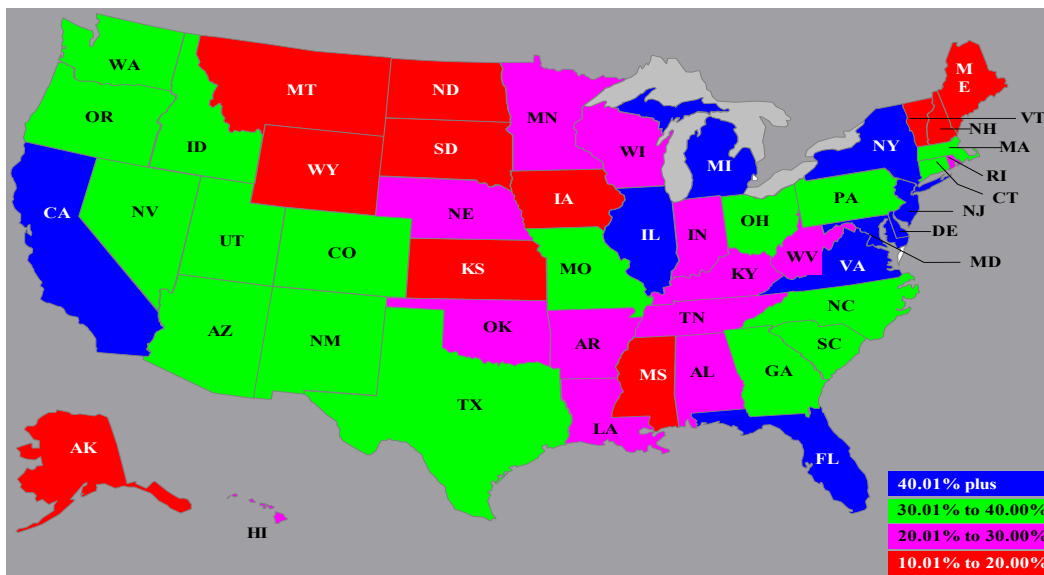
The question remains: Where among the states is the knowledge economy emerging?

I have been working with a research team made up of a Clemson undergraduate finance major, Sarah Miller, and an MBA student from Viet Nam, Vien Nguyen. The three of us have been gathering data, producing maps, and building some statistical models that we hope will identify the location of the emerging knowledge economy.

The next two charts show some of our data.

The first state outline map here gives data for the share of the workforce employed in services, which is where the knowledge workers are employed.

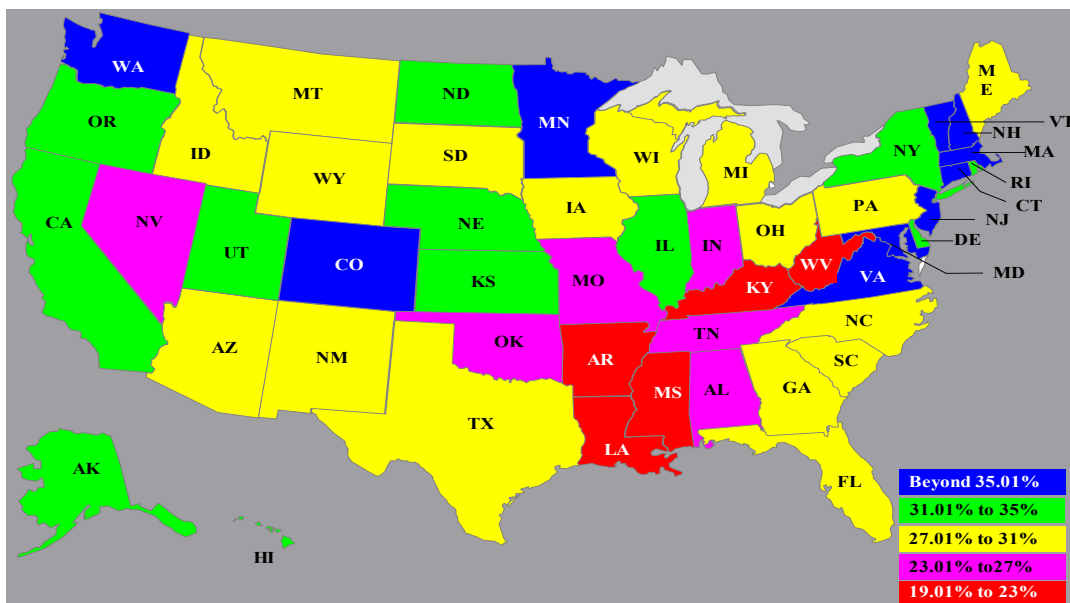
SERVICES SECTOR SHARE OF
TOTAL EMPLOYMENT 2004



Notice the swath of states that sweeps from Texas to the Northwest. If services is where the action will be found, this is clearly an emerging region. Also, notice South Carolina, North Carolina, Georgia, Florida, Virginia, Maryland, and Delaware. Here we see another potential knowledge economy.

The next map shows the simplest and most direct linkage to the emerging knowledge economy. Here we see the share of the adult population with college degrees. Blue and green states are the hot ones.

PERCENT OF POPULATION 25 AND OVER WITH A COLLEGE OR PROFESSIONAL DEGREE IN 2000



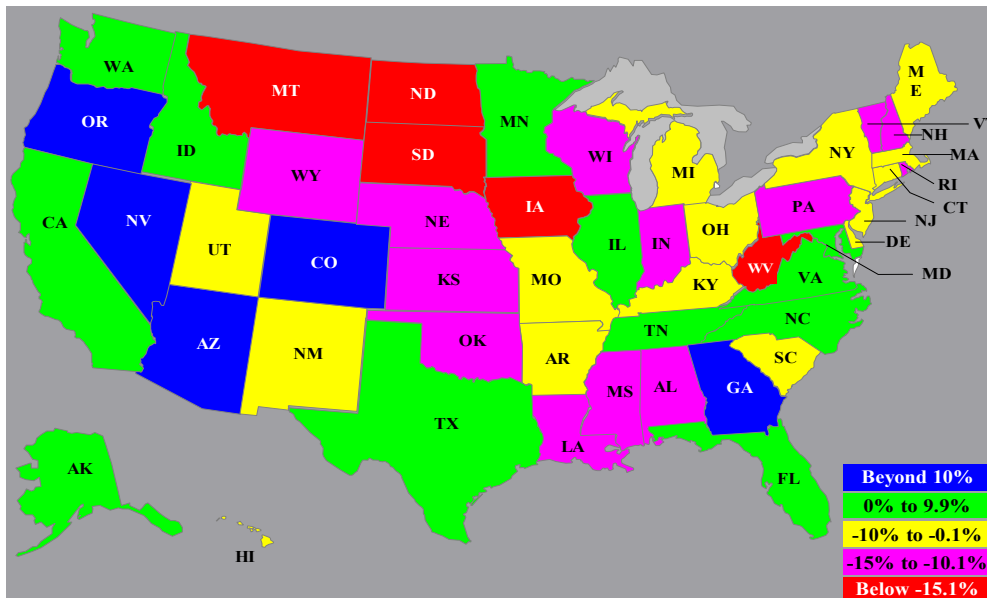
But where are the knowledge workers moving?

It is one thing to see the location of strong services economies, but another to observe where knowledge workers may be moving. How do they vote with their feet?

Unfortunately, we do not have precise data on the movement of people with specialized skills in the knowledge economy. But we do have something close. We have migration data on the 1995-2000 movement of single, college educated, individuals who were 25-39 years old. These are typically the most footloose people in the economy, and would generally include future knowledge workers.

In the chart below, look for the green and blue states. These are the hot locations. Note that South Carolina was a net exporter of this part of the migrating population.

PERCENT OF NET INTERNAL MIGRATION OF PEOPLE WHO WERE YOUNG, SINGLE & COLLEGE EDUCATED



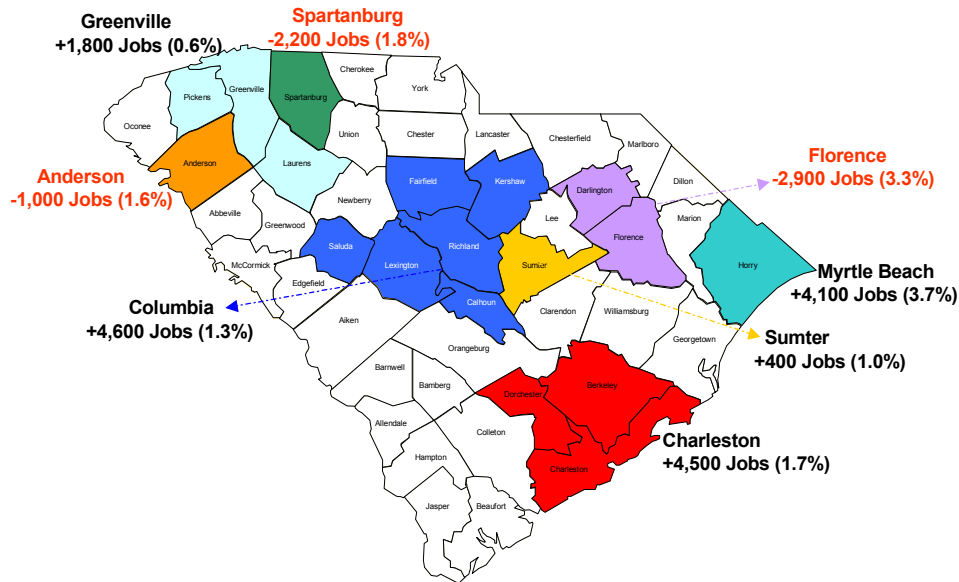
In an effort to explain these migration patterns, my research team built some statistical models. Here's what we learned. These migrating people steer away from high tax states. They move toward states with a larger services economy, and they like "cool" states, which is to say states that rank high in cultural activities. Interestingly enough, after adjusting for taxes, cool places, and the services economy, this group was not influenced by per capita income. They seem to be looking for opportunity.

How is the South Carolina Economy Faring?

South Carolina continues to show employment growth and rising total personal income. Even so, the state pulse beat is one of the weaker ones on the nation. We hear a great deal about the state unemployment rate, which has now fallen below 7%, but the current 6.1% still places the state among the five higher unemployment states. The next chart shows how the various state regions have fared. Once again, we see the growth sector: Professional & Business Services.

Employment Change by Metropolitan Areas Annual Average 2004 – 2005

Over the year, Columbia MSA added 4,600 jobs, primarily in professional and business services (+1,500). Charleston MSA grew by 4,500, mostly in retail trade (+1,600).



Source: SCESC/LMI

Taking one last look at the 2006 forecast

The December Situation Report began with the annual report card. I provided the forecast I had made for the 2005 end-of-year numbers and compared those estimates with the actual outcomes. I also crowed a bit about the good calls. I then provided some estimates for December 2006, but indicated that I would make some revisions based on data that still had not arrived. (I am also adjusting for the effects of war threats on Iran.)

For the record, I provide the report card and final numbers of December 2006.

Report Card Time

Forecast & Outcome

2005	<u>Forecast</u>	<u>Actual</u>
GDP Growth	3.7%	3.7%
Inflation	2.5%	2.2%
30-yr. Mortg.	6.25%	6.26%
Unemploy	5.0%	4.9%
Prime	6.00%	6.75%
Dow-Jones	11,200	10,717
Employ Gain	150M	215M
Oil	\$40	\$54
Gold	\$400	\$500

December 2006

GDP	3.8%
Inflation	2.7%
Mortgage	6.80%
Unemploy	4.4%
Prime	7.70%
Dow	11,500
Employ	200M
Oil	\$ 67.00
Gold	\$ 510