The Great Inflection

SCSBA Annual Legislative Advocacy Conference 2013

Saturday, December 7th
Shipyard Plantation, Hilton Head Island
Recommendations for Reading


- "The Case Against High School Sports" published in The Atlantic, October 2013 by Amanda Ripley

In-flec-tion (noun)-
a bend or angle. In mathematics, a change of curvature.

Other Titles in Recent Years

- The Breach (2010)
- Era of Austerity (2011)
- A Slight Acquaintance (2012)
Economic and Budget Dashboard

- State Economic Data,
- FY 12-13 Close-Out,
- FY 13-14 Budget,
- FY 14-15 Outlook.

Economic Data

Total Employment in South Carolina

Source: South Carolina Department of Employment and Training
Graph updated June 17, 2015
The 37 Percent Mystery: Where Did All the Workers Go?  The Atlantic, April 2013 by Derek Thompson

- (1) They retired. The country is getting older, and older countries have a smaller share of workers.
- (2) They went to school. More young people are going to college, and young people in college are less likely to look for work.
- (3) They just stayed home. They stopped looking for work and decided instead to raise their kids, they sat on the couch waiting for the market to return; they filed for disability insurance, The recession discouraged them from seeking a job.
- (4) And the factories closed. Behind all of these stories lies the long decline of manufacturing, which has very little to do with the Great Recession, or college attendance, or demographics, but nonetheless explains a significant portion of falling participation rates among prime-age workers.
"Jobless Recoveries Are Here to Stay, Economists Say, But It's a Mystery Why"
By Jim Tankersley, September 19, 2013  WAPD

The U.S. economy just hasn't looked like its old self lately, especially when it comes to regaining the jobs lost during a recession. It looks a lot more like 1980s-era Europe — slow to rebound and hire after a downturn, leaving workers to flail for years in a weak job market.

Why Is This Important to SC State Government?
✓ Most income taxes are derived from wage withholding.
✓ State and Local Governments provide most educational services from kindergarten through graduate school.
✓ State Government administers the unemployment insurance program, Medicaid, SNAP.

FY 12-13 Close-Out
SC State Budget
FY 12-13 FY 13-14
(appropriations) (appropriations)
- General Funds $6.1 Billion $6.4 Billion
- Federal Funds $8.7 Billion* $7.6 Billion
- Other Funds $8.2 Billion $8.6 Billion
TOTAL: $23.0 Billion $22.5 Billion
* $1.5 Billion transferred to unallocated account for SNAP (food stamps)

SC Personal Income $161.9 Billion
(Budget is about 14% of GTP of economy)

Source: State Budget Report

Where is the Money Spent?
FY 2013-14 Appropriations

General Funds

Total Funds

Source: Office of State Budget

Top 50 Statewide
Federal Revenue Sources
Fiscal Years 1994-95 and 2011-12

<table>
<thead>
<tr>
<th>Rank</th>
<th>Source Code</th>
<th>Source Name</th>
<th>Revenue 1994-95</th>
<th>Revenue 2011-12</th>
<th>Revenue Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D04H01</td>
<td>U.S. Federal</td>
<td>$1,599,181,800</td>
<td>$2,469,854,300</td>
<td>55%</td>
</tr>
<tr>
<td>2</td>
<td>D02H01</td>
<td>State Shares</td>
<td>$605,285,923</td>
<td>$655,246,350</td>
<td>8%</td>
</tr>
<tr>
<td>3</td>
<td>D06H01</td>
<td>State Enterprise Revenue</td>
<td>$606,410,790</td>
<td>$724,732,850</td>
<td>19%</td>
</tr>
<tr>
<td>4</td>
<td>D14H01</td>
<td>Other Federal</td>
<td>$389,021,907</td>
<td>$404,021,907</td>
<td>4%</td>
</tr>
<tr>
<td>5</td>
<td>D05H01</td>
<td>Other State</td>
<td>$380,878,380</td>
<td>$383,978,380</td>
<td>1%</td>
</tr>
<tr>
<td>6</td>
<td>D03H01</td>
<td>Federal Expenditures</td>
<td>$322,741,202</td>
<td>$322,741,202</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>D13H01</td>
<td>Federal Grants</td>
<td>$316,063,836</td>
<td>$316,063,836</td>
<td>0%</td>
</tr>
<tr>
<td>8</td>
<td>D11H01</td>
<td>Other Revenue</td>
<td>$300,000,000</td>
<td>$300,000,000</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total: $13,795,346

Source: Office of State Budget, May 2015
Top 10 Statewide Other Revenue Sources
Fiscal Years 1984-95 and 2011-12

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University Fees</td>
<td>916,033</td>
<td>2,022,592</td>
<td>2,137,592</td>
<td>2,075,489</td>
</tr>
<tr>
<td>State Tuition - 4yr.</td>
<td>401,918</td>
<td>664,148</td>
<td>111,560</td>
<td>25,850</td>
</tr>
<tr>
<td>Health Care and Medical Reimbursement</td>
<td>10,614</td>
<td>15,398</td>
<td>15,331</td>
<td>14,013</td>
</tr>
<tr>
<td>Temporary Tax - General Revenue Bonding</td>
<td>4,545,741</td>
<td>5,232,618</td>
<td>7,508,120</td>
<td>7,632,626</td>
</tr>
<tr>
<td>University Fees - Training and Services</td>
<td>12,579</td>
<td>16,810</td>
<td>19,588</td>
<td>21,231</td>
</tr>
<tr>
<td>Community Colleges - Revenue Bonding</td>
<td>14,541</td>
<td>18,163</td>
<td>21,550</td>
<td>21,201</td>
</tr>
<tr>
<td>Other Local Government - Revenue Bonding</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Revenue Bonding - Revenue Bonding</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Other Revenue Bonding</td>
<td>15,568</td>
<td>17,544</td>
<td>21,620</td>
<td>21,201</td>
</tr>
</tbody>
</table>

Source: Office of State Budget, Oct. 2011

2002-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Personal Income Growth</th>
<th>Population Growth</th>
<th>Actual General Fund Revenue Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2.7%</td>
<td>1.1%</td>
<td>-3.4%</td>
</tr>
<tr>
<td>2003</td>
<td>3.4%</td>
<td>1.0%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2004</td>
<td>6.0%</td>
<td>1.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2005</td>
<td>6.1%</td>
<td>1.4%</td>
<td>7.8%</td>
</tr>
<tr>
<td>2006</td>
<td>7.9%</td>
<td>2.1%</td>
<td>9.7%</td>
</tr>
<tr>
<td>2007</td>
<td>5.9%</td>
<td>2.0%</td>
<td>8.2%</td>
</tr>
<tr>
<td>2008</td>
<td>5.0%</td>
<td>1.9%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>2009</td>
<td>-3.3%</td>
<td>1.3%</td>
<td>-12.5%</td>
</tr>
<tr>
<td>2010</td>
<td>3.4%</td>
<td>1.0%</td>
<td>-5.3%</td>
</tr>
<tr>
<td>2011</td>
<td>4.7%</td>
<td>0.9%</td>
<td>6.4%</td>
</tr>
<tr>
<td>2012</td>
<td>3.6%</td>
<td>1.0%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Average Annual Percent Change

Cumulative General Fund Changes
July 2008 - July 2013
Fiscal Year 2013-14 Budget:
H3740 General Appropriations Bill &
H3711 Capital Reserve Fund

Sources of Revenue above previous year Appropriation Base

Recurring General Fund Revenue Growth $349 Million

Non-Recurring Sources
  Capital Reserve Fund $113 Million
  Non-Recurring Revenue $132 Million
  Tobacco MSA $121 Million
Fiscal Year 2013-14 Appropriations

- State Department of Education: $577 Million
- Education Finance Act: $24 Million
- Instructional Materials: $26 Million
- 4K Expansion: $110 Million
- Health and Human Services (Medical): $30 Million
- Local Government Fund: $16 Million
- Department of Commerce Closing Fund: $16 Million
- Ready SC (Workforce Training): $16 Million

Fiscal Year 2013-14 Appropriations

- Transportation Funding:
  - Sales Tax on Car/Sale Transfer to DOT
  - SIB - Bridges / Interstates
  - Excess 12-13 Revenue to DOT: $44 Million
- Employee Health Insurance: $44 Million
- Small Business Tax Relief: $90 Million (160 Million when fully implemented)
- Homestead Exemption Shortfall: $12 Million
- General Reserve Fund: $1 Million (Fully funded at a level of 3%)

Two Viewpoints on the Use of General Funds for Transportation Needs

**Good Policy**
- Overall taxes are too high.
- Re-prioritize spending.
- Borrowing issue

**Bad Policy**
- Gas Tax is a user fee and South Carolina's gas tax is low.
- Using General Fund for road repair squeezes out funding for other needs,
Good Policy: Use of General Funds for Transportation Needs

Bad Policy: Use of General Funds for Transportation Needs

The Policy Choice and Implications

Please indulge me for a moment while I offer a very "earthy" description of public budgeting.
Three “Big” Pigs
K12 Education, Health Care/Social Services and Higher Education comprise 82% of General Fund spending.

“Welcome” to Transportation
SC Dept of Transportation General Fund Appropriations for FY12-13 were $57,270. DOT’s TOTAL funds budget was $1,491,764,666.

QUESTION
Will gas tax collections (at the current level of tax per gallon) produce the amount of funding necessary to meet expected needs?

Hint: the answer is no.
Total Motor Fuel Revenue Per Capita in South Carolina

South Carolina Motor Fuels Tax Rates
By Date of Tax Rate Change
(Cents Per Gallon)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tax Rate</th>
<th>Legislative Enactment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922</td>
<td>2 cents</td>
<td>Act 494 of 1922</td>
</tr>
<tr>
<td>1923</td>
<td>3 cents</td>
<td>Act 146 of 1923</td>
</tr>
<tr>
<td>1925</td>
<td>5 cents</td>
<td>Act 34 of 1925</td>
</tr>
<tr>
<td>1929</td>
<td>6 cents</td>
<td>Act 102 of 1929</td>
</tr>
<tr>
<td>1958</td>
<td>7 cents</td>
<td>Act 855 of 1958</td>
</tr>
<tr>
<td>1972</td>
<td>8 cents</td>
<td>Act 1575 of 1972</td>
</tr>
<tr>
<td>1977</td>
<td>9 cents</td>
<td>Act 143 of 1977</td>
</tr>
<tr>
<td>1979</td>
<td>10 cents</td>
<td>Act 197 of 1979</td>
</tr>
<tr>
<td>1980</td>
<td>11 cents</td>
<td>Act 506 of 1980</td>
</tr>
<tr>
<td>1981</td>
<td>13 cents</td>
<td>Act 177 of 1981</td>
</tr>
<tr>
<td>1987</td>
<td>15 cents</td>
<td>Act 197 of 1987</td>
</tr>
<tr>
<td>1989</td>
<td>16 cents</td>
<td>Act 197 of 1989</td>
</tr>
</tbody>
</table>

Note: 1. The rate was 10 cents per gallon on July 1, 1989. 2. The rate was 16 cents per gallon on July 1, 1990.

South Carolina Gasoline Tax Rate Indexed for Inflation
(Base Year = 1989)
The First Step for Statewide Transportation Needs: Act 98

- DOT to annually transfer $50 M to the STB to be used to finance bridge replacement, rehabilitation projects, and expansion and improvements to existing mainline interstates.
- Approximately $500 M in bonds may be issued.
- Redirects 50% of the General Fund portion of the sales tax on motor vehicles to the State Non-Federal Aid Highway Fund, used exclusively for highway, road and bridge maintenance, construction and repair.
- Estimated to be $41.4 M (EIA held harmless).
- Provides DOT a one-time appropriation of $50 M from FY 2012-13 surplus revenue.
- At a 5:1 match $50 M will generate $250 M in total funds.
FY 14-15 General Fund Revenue ("New Money") Outlook

SUMMARY OF AVAILABLE REVENUES (est. "New Money") - FY14-15

Recurring: $238,712,675

Non-Recurring:
- FY12-13 Carryover/Surplus: $68,379,147
- FY13-14 Surplus (est.): $95,307,438
- FY13-14 Capital Reserve Fund: $137,155,905

Est. TOTAL "New Money" recurring and non-recurring: **$519,636,147**

Notes: 3/22/15 15:51

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FY 2014-15 Appropriation Outlook

*Just the basics*

- EFA MOE @ $2101 - $34M
- EFA Full Funding: $517M
- Local Government Fund
  - Annualization: $10M
- Local Government Fund Full Funding: $75M
- Medicaid: $?? (Tens or Hundreds of Millions)
- Employee Health Plan
  - Annualization: $23M
- Employee Raise: $15M per 1%
- General Reserve Fund: $27M
- Capital Reserve Fund: $11M
- Higher Education: $??
- Transportation: $??
Budget Summary

- FY 12-13 Close Out, All reserve funds fall (7% Total) & $68M in Unobligated Reserve.

- FY 13-14, likely no General Fund Budget Shortfall Because Appropriations are Below the Previous Year's Revenue Collections.

- FY 14-15, Formula Funding Challenges, Cost of Health Care (Medicaid & State Health Plan), Transportation, Tuition.

"It's P.Q. and C.Q. as Much as I.Q."
By Thomas Friedman

New York Time Editorial
Published January 29, 2013

P.Q. is Passion Quotient
C.Q. is Curiosity Quotient

Friedman

- President Obama's first term was absorbed by dealing with the Great Recession. I hope that in his second term he'll be able to devote more attention to the Great Inflection.

- Dealing with the Great Recession was largely about "Yes We Can" — about government, about what we can and must do "imaginatively" to shore up the safety nets and institutions that undergird our society and economy. Obama's Inaugural Address was a full-throated defense of this "public" role of the unique public-private partnership that makes America great. But, if we're to sustain the kind of public institutions and safety nets that we've used to, it will require a lot more growth by the private sector (not just tax cuts), a lot more entrepreneurship, a lot more start-ups and a lot more individual risk-taking — things the president rarely speaks about. And it will all have to happen in the context of the Great Inflection.

- What do I mean by the Great Inflection? It means something very big happened in the last decade. The world was connected in a hyperconnected in a way that is impacting every job industry and school, but was largely disrupted by post-9/11 and the Great Recession.
From Connected to Hyper-Connected

From the World Wide Web and Internet to
Facebook, Twitter, LinkedIn, Cloud Computing, 4G
Wireless and Skype

Remember this?

Facebook, Twitter, LinkedIn
Because of this technology, it is now cheaper to:

- Work
- Invent
- Entertain
- Collaborate
- Learn
The use of this technology means that many labor markets are now international in scope.

“Everyone who wants a job must now demonstrate how they can add value better than the new alternatives.”

“The speed with which every job and industry changes goes into hypermode.”

ABC News, December 3, 2013

Apple's announced today it will be installing a tablet computer at of every one of its 100,000 restaurant and bar table tops across the U.S. With the devices, users will be able to order items, place orders, go through checks and tip the server. (This filled tablet help us broker more conversations)

Amazon Prime Air would use unmanned flying vehicles for delivering packages

CNBC Report, December 9, 2013
The old assumption was that your educational foundation would last your whole lifetime. Now the norm is lifelong learning.

Race Against the Machine
by Erik Byrnjolfsson and Andrew McAfee.

http://www.jotform.com/erik-byrnjolfsson/the-key-to-growth-race-economy-against-the-machine.html

Erik Byrnjolfsson
and Andrew McAfee.

Their Observation:
Productivity, Median Income and Employment have tracked each other for two centuries.
Byrnjolfsson:

- "Some people think it's a law that when productivity goes up, everybody benefits. There is no economic law that says technological progress has to benefit everybody or even most people. It's possible that productivity can go up and the economic pie gets bigger, but a majority of people don't share in that gain."


Where Did the Jobs Go?
Economic Explanations

- Cyclical Unemployment – absence of demand,

- Stagnation – long term decline in the ability to innovate and increase productivity;

- End of Work – (Jeremy Rifkin’s 1995 book) "we are entering a new phase in world history – one in which fewer and fewer workers will be needed to produce the goods and services for the global population."

The Division of Rewards

**Winners**
- High Skilled Workers
- Superstars
- Capital

**Losers**
- Low Skilled Workers
- Everyone Else
- Labor
Their Conclusion

"The stagnation in median income is not because of the lack of technological progress. On the contrary, the problem is that our skills and institutions have not kept up with the rapid changes in technology."

Toward an Agenda for Action

EDUCATION
1. Invest in education.
2. Hold teachers accountable.
3. Separate student instruction from testing and certification.
4. Keep K-12 students in classrooms longer.
5. Increase the ratio of skilled workers in the US by encouraging skilled immigrants.
Toward an Agenda for Action

ENTREPRENEURSHIP
6. Teach entrepreneurship as a skill,
7. Boost entrepreneurship in US by creating founders’ visas for entrepreneurs,
8. Create clearinghouses and databases to disseminate templates for new business,
9. Aggressively lower the governmental barriers to business creation.

INVESTMENT
10. Invest in communications and transportation infrastructure,
11. Increase funding for basic research and government R&D institutions,

LAWS, REGULATIONS & TAXES
12. Preserve flexibility in labor markets,
13. Make it comparatively more attractive to hire a person than to buy more technology,
14. Decouple benefits from jobs to increase dynamism,
15. Don’t rush to regulate new network businesses,
16. Eliminate or reduce the massive home mortgage subsidy,
17. Reduce subsidies to financial services,
18. Reform the patent system,
19. Shorten copyright periods.
So, What Does All This Mean?
Let's Return to Friedman
“It's a 401(k) World” NY Times 4/30/13

- More now rest on you.
- Self motivated.
- There will be fewer guarantees from institutions that were
  the foundation of previous economies: companies, unions and
  government.
- For Youth:
  - More mentors, social networks, and role models
  - More "Certification" employment.

Paul Romer, (economist, NYU)
Library of Economics and Liberty

Economic growth occurs whenever people take resources and rearrange
them in ways that make them more valuable. A useful metaphor for
production in an economy comes from the kitchen.

To create valuable final products, we mix inexpensive ingredients
together according to a recipe. The cooking one can do is limited by the
supply of ingredients, and most cooking in the economy produces
undesirable side effects.

If economic growth could be achieved only by doing more and more of
the same kind of cooking, we would eventually run out of raw materials
and suffer from unacceptable levels of pollution and nuisance. Human
history teaches us, however, that economic growth springs from better
recipes, not just from more cooking.

New recipes generally produce fewer unpleasant side effects and
generate more economic value per unit of raw material.

Paul Romer,
Library of Economics and Liberty

Every generation has perceived the limits to growth that finite
resources and undesirable side effects would pose if no new
recipes or ideas were discovered.

And every generation has underestimated the potential for
finding new recipes and ideas.

We consistently fail to grasp how many ideas remain to be
discovered.

The difficulty is the same one we have with compounding:
possibilities do not merely add up; they multiply.
The Great Inflection

- Used in the context by Friedman, the Great Inflection refers to the steep angle in which technological change is growing.

- But, if Romer is correct, another inflection of growth can occur if new recipes or ideas are discovered and applied to the economy.

Justice Louis Brandeis, dissenting opinion, New State Ice Company v. Liebmann 285 US 262 (1932)

- "There must be power in the state and the states to experiment, through experimentation, use cooperative practices and innovations to meet changing social and economic needs. It cannot be said that the framers of the Fourteenth Amendment, or the states which ratified it, intended to deprive us of the power to combat the evil of technological unemployment and excess profiteering capacity which have attended progress in the modern age. To permit experimentation in things social and economic is a grave responsibility. Decisions of the right to experiment may be fraught with serious consequences upon the nation. It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory and try novel social and economic experiments without risk to the rest of the country."

- Note: the origins of the term "laboratory of democracy" are noted.

The Take-Away

Let's get cooking, trying new recipes, in the state and local government kitchens that are our laboratories of democracy.
Thank You