The Great Slowcovery & Sustainability of State Budgets

Natalie Mullis
Chief Economist, Legislative Council Staff
leg.colorado.gov/lcs
303-866-4778
Natalie.Mullis@state.co.us

August 8, 2017
National Conference of State Legislatures
Annual Summit
Slowcovery & Sustainability of State Budgets

• What do you mean by “Slowcovery”?

• What does it mean for state budgets?

Colorado State Capitol, Reflected on the Windows of the Joint Budget Committee
The Great Slowcovery

Cumulative GDP Growth
Adjusted for Inflation

- Dec. 1983 to June 1990
- Apr. 1991 to Feb 2001
- Dec. 2001 to Nov. 2007

Years of Recovery & Expansion Since Recession

July 2009 to …

Source: Bureau of Economic Analysis. Seasonally adjusted annualized rates.
## Slowcovery

**What affects long run economic growth?**

<table>
<thead>
<tr>
<th>Labor Force Growth Rate</th>
<th>Productivity Growth Rate</th>
</tr>
</thead>
</table>

GDP

Hours Worked
Slowcovery

Growth in Supply of Labor Subdued

Cumulative U.S. Labor Force Growth

- Dec. 1983 to June 1990
- Dec. 2001 to Nov. 2007

Years of Recovery & Expansion Since Recession

A rising share of the population is age 65+

Prime Working-Age Population (25 to 54)
Share of Total U.S. Population

Source: U.S. Census Bureau, intercensal population estimates and 2014 population projections.
People have chosen to supply less labor

Labor Force Participation Rate, Age 16+

Age matters

U.S. Labor Force Participation Rate, by Age

Prime Working Age (25 to 54)
Ages 20 to 24
All Working Ages (16+)
Ages 16 to 19
Ages 55+

2010 share of population age 65+

Source: U.S. Census Bureau, 2010 Census.
2015 share of population age 65+

Source: U.S. Census Bureau, population estimates (vintage 2015).
2030 share of population age 65+

Source: 2005 Census projections and 2013 state demography office projections as available.
Slowcovery

Productivity growth subdued

Cumulative **Labor Productivity Growth**

*Real Output per Hour*

- Dec. 1983 to June 1990
- Apr. 1991 to Feb 2001
- Dec. 2001 to Nov. 2007

July 2009 to …

Years of Recovery & Expansion Since Recession

Automation Is Changing the Economy

Dark blue indicates how much the share of productivity gains that accrues to workers has changed.
Stock Market Growth During Expansions

Cumulative Growth in NASDAQ Index

- Dec. 1983 to June 1990
- Apr. 1991 to Feb 2001
- Dec. 2001 to Nov. 2007

Source: Nasdaq; St. Louis Federal Reserve.
What does it mean for state budgets?

State budgetary pressures are rising

Declining per capita revenue
  Income
  Sales
  Gas

Rising demand for state services
  Population growth

Budget Pressures
Consumer spending rises and falls with age

Average 2015 Expenditures

Incomes peak for those in their 40s and 50s

Average 2015 Incomes

Taxes peak for those in their 40s and 50s

Average 2015 Taxes

The Impact of the Aging U.S. Population on State Tax Revenues, Alison Felix and Kate Watkins; https://www.kansascityfed.org/publications/research/er/archive
Slowdown in real consumer spending

Real U.S. Retail and Food Service Sales
Percent Change, Year-over-Year

Slowdown in real wage growth

Cyclically Neutral Aggregate Real Wage Growth
Percent Change, Year-over-Year

What does aging mean for state tax revenue?

2011 & 2030 Population

2011 Average per Person Liability

×

Income Tax

Sales Tax

= Estimate of Total 2011 and 2030 Revenue

Source: Authors’ calculations (Felix and Watkins 2013).
Tax revenue will decline on a per capita basis

Sales Tax per Capita
Projected Percent Change, 2011 to 2030

Source: Authors’ calculations (Felix and Watkins 2013).
Tax revenue will decline on a per capita basis

Income Tax per Capita
Projected Percent Change, 2011 to 2030

Source: Authors’ calculations (Felix and Watkins 2013).
General fund revenue is projected to grow at a rate consistent with inflation and population growth.

General Fund Revenue

*Inflation-adjusted, per capita*

Source: Office of the State Controller and Legislative Council Staff June 2017 revenue forecast.
Aging will shift state expenditures

- **State and local pensions**
- **Health care services**
  - Low income elderly (Medicaid)
  - Higher insurance premiums for government employers
- **Shifts in demands for certain services**
  - Accessible transportation
  - Home health
- **Shifts in support for services**
  - Education
Colorado General Fund Budget Trends

The state budget is structurally unsustainable

**TABOR Growth**, 100%

General Fund Appropriations, 97%

General Fund Revenue, 69%

Sources: Colorado State Controller’s Office, Joint Budget Committee Staff, and Legislative Council Staff. FY 2017 and FY 2018 figures are forecasts.

*Excludes newly eligible caseload funded by the federal government pursuant to the Affordable Care Act, which added an additional 411,000 in FY 2015-16.

**TABOR growth represents the cumulative growth from the population and inflation adjustments used to calculate each year’s limit. It does not represent growth in the TABOR limit, which differs because the TABOR limit was also adjusted for changes in enterprise status.
Sources: Colorado State Controller’s Office, Joint Budget Committee Staff, and Legislative Council Staff. FY 2017 and FY 2018 figures are forecasts.

*Excludes newly eligible caseload funded by the federal government pursuant to the Affordable Care Act, which added an additional 411,000 in FY 2015-16.

**TABOR growth represents the cumulative growth from the population and inflation adjustments used to calculate each year’s limit. It does not represent growth in the TABOR limit, which differs because the TABOR limit was also adjusted for changes in enterprise status.
Colorado General Fund Budget Trends

The state budget is structurally unsustainable: School Finance

Medicaid

Health Care Policy & Financing

General Fund Appropriations, 178%

State Share School Finance, 114%

TABOR Growth*, 100%

General Fund Appropriations, 97%

General Fund Revenue, 69%

*Excludes newly eligible caseload funded by the federal government pursuant to the Affordable Care Act, which added an additional 411,000 in FY 2015-16.

**TABOR growth represents the cumulative growth from the population and inflation adjustments used to calculate each year's limit. It does not represent growth in the TABOR limit, which differs because the TABOR limit was also adjusted for changes in enterprise status.

Sources: Colorado State Controller's Office, Joint Budget Committee Staff, and Legislative Council Staff. FY 2017 and FY 2018 figures are forecasts.
Colorado General Fund Budget Trends

The state budget is structurally unsustainable: 

**School Finance**
- Medicaid
- Higher Education Funding

![Graph showing trends in various budget components](graph.png)

Sources: Colorado State Controller’s Office, Joint Budget Committee Staff, and Legislative Council Staff. FY 2017 and FY 2018 figures are forecasts.

*Excludes newly eligible caseload funded by the federal government pursuant to the Affordable Care Act, which added an additional 411,000 in FY 2015-16.

**TABOR growth represents the cumulative growth from the population and inflation adjustments used to calculate each year’s limit. It does not represent growth in the TABOR limit, which differs because the TABOR limit was also adjusted for changes in enterprise status.
Colorado General Fund Budget Trends

The state budget is structurally unsustainable:

- School Finance
- Medicaid
- Higher Education Funding
- Infrastructure Funding

Index FY 2000-01 = 100

Sources: Colorado State Controller’s Office, Joint Budget Committee Staff, and Legislative Council Staff. FY 2017 and FY 2018 figures are forecasts.

*Excludes newly eligible caseload funded by the federal government pursuant to the Affordable Care Act, which added an additional 411,000 in FY 2015-16.

**TABOR growth represents the cumulative growth from the population and inflation adjustments used to calculate each year’s limit. It does not represent growth in the TABOR limit, which differs because the TABOR limit was also adjusted for changes in enterprise status.
Summary

• Slower long run economic growth
  – Slower labor force growth
  – Slower productivity growth
  – Automation has shifted some productivity gains away from labor

• Increasing pressure on state budgets
  – Slower sales and income tax growth
  – Increased income tax volatility
  – Greater pressure on expenditures
Colorado General Fund
Revenue and Expenditures, FY 2016-17

Revenue, $10.8 Billion
- 3%, Other
- 5%, Corporate Income
- 63%, Individual Income
- 29%, Excise Taxes

Expenditures, $9.9 Billion
- 6%, Other
- 8%, Human Services
- 27%, Health Care Policy & Fin.
- 5%, Judicial
- 8%, Corrections
- 9%, Higher Education
- 38%, P-12 Education

Totals may not sum due to rounding.
Source: Joint Budget Committee. Excludes transfers for transportation and capital construction.
Supplemental Slide

Medicaid Enrollment

Supplemental Slide

State & Federal Medicaid Expenditures*

Billions of Dollars

FY 2014-15 Expenditure Shares**

- Adults 65 and older (19.8%)
- Parents/Caretakers (13.3%)
- Adults without children (18.7%)
- Pregnant women (3.4%)
- Disabled individuals (24.7%)
- Children (17.6%)
- Foster care (1.7%)
- Breast/Cervical cancer (0.1%)
- Non-U.S. citizens (0.8%)

Source: Joint Budget Committee Staff. p=Projection. *Amounts include supplemental payments to providers and financing mechanisms. **FY 2014-15 expenditure shares by population shown in parentheses.