U.S. GDP ($b) & Recessions

10/6/16
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Expectations...
Real Per-pupil State Appropriations

- Pre-Recession
- Post-Recession
- Proposed
- Trend

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Why?

1. Manage the business cycle
2. Make promises we can keep and keep the promises that we make
3. Avoid irrational policy choices
1. Tax collections are volatile

2. Trends are predictable - HB311 asks staff for them

3. Above-trend collections are a windfall - HJR11 asks EAC to consider that

4. HB311 and HRJ11 combined create a state fiscal health dashboard
Trend and Cycle

Sales Tax Collections

Millions

Trend

Cycle

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UTAH STATE LEGISLATURE
How?

Revenues

Experience → Scenario Assumptions → Estimated Revenue
How?

Revenues

• Modeled major tax types (sales, income, corporate)

Expenditures

• Used Federal Reserve DFAST economic indicators for Adverse and Severely Adverse scenarios
Revenue Scenarios

1. Using REMI, replace baseline national economic indicators with DFAST indicators
2. Recalibrate regional control to get state share
3. Use alternative state share in time series revenue model (SAS, SPSS, R, etc.)
How?
Expenditures

Experience → Scenario Assumptions → Estimated Costs

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How?

Revenues

• Modeled major tax types (sales, income, corporate)
• Used Federal Reserve DFAST economic indicators for Adverse and Severely Adverse scenarios

Expenditures

• Modeled enrollment driven programs (Medicaid, higher ed, public ed)
• Used 2001 and 2009 as proxies for Adverse Severely Adverse
Results Over Time

Revenues ($b)

Expenditures ($b)

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Magnitude of Results

Value at Risk ($b over 2-3 yrs)

- Adverse
  - Expenditures
  - Revenue (2 yr)
  - Revenue (Year 3)

- Severe
  - Expenditures
  - Revenue (2 yr)
  - Revenue (Year 3)
It takes a tool kit.
Inventory of Buffers

• **Easily Accessible:** Unappropriated balances, operating reserves, buildings working rainy day fund

• **Moderately Accessible:** Nonlapsing balances, roads working rainy day fund, capital improvements relief valve

• **Somewhat Difficult to Access:** Capital improvements corpus, restricted fund balances

• **Difficult to Access:** Formal rainy day funds

• **Very Difficult to Access:** Permanent trust funds
Magnitude of Results

Value at Risk ($b over 2-3 yrs)

- **Adverse**
  - Expenditures: 0.5
  - Revenue (2 yr): 0.7
  - Revenue (Year 3): 0.8

- **Severe**
  - Expenditures: 1.5
  - Revenue (2 yr): 1.5
  - Revenue (Year 3): 1.5

Reserves/Offsets ($b)

- **Easy**
- **Moderate**
- **Somewhat Difficult**
- **Difficult**

Expenditures

Revenue (2 yr)

Revenue (Year 3)
Step-by-step

1. Start with a consensus baseline revenue forecast and budget
2. Model revenue alternatives
3. Model spending alternatives
4. Inventory and categorize buffers
5. Compare VAR with buffers and assess adequacy
Pitfalls

• Takes money off the table
• Ruins certain political narratives
• Relies on Fed Reserve scenarios for banks
• Too short-term
• Speculative
Utah’s Future Plans

• Diversify economic scenarios
• Lengthen timeframe from 2 to five years
• Communicate probabilities
• Require in statute?